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The Farmers home administration farm ownership program in Iowa

Robert Wilson Wilcox
Iowa State College

THE FARMERS HOME ADMINISTRATION
FARM OWNERSHIP PROGRAM IN IOWA

by

Robert W. Wilcox

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Signature was redacted for privacy.

In Charge of Major Work

Signature was redacted for privacy.

Head of Major Department

Signature was redacted for privacy.

Dean of Graduate College

Iowa State College

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INTRODUCTION

The urge to own a piece of land has always been great. This hunger for a place which is theirs alone is deep-seated among Iowa people as well as in citizens of the other 47 states. The attitude is well set out in the book, A Century of Farming in Iowa: "The typical Iowa farmer and his family have a strong continuing desire to own a farm that belongs to them alone. The family-sized farm grew up here, and won its popularity as the most practical unit for this region." (4, p. 1)

Land ownership has been regarded as a means to personal independence and security in contrast to the insecurity inherent in the landless status a large share of immigrants had endured in Europe. The concept of land ownership as a means to security was handed down to the generations of native born and gave rise to the demand for land by individuals. This demand always outran the machinery established by Congress to move public land into private hands according to Hibbard (2). The lag appeared to be as much as 50 years between Congressional land disposal policies and current needs.

Settlement Preceded Survey

Frontiersmen had great contempt for laws restricting settlement to surveyed areas and settled ahead of surveys in the face of possible dispossession. In Iowa they even settled before treaties with the Indians made land available to the white man.

The pressure exerted by the settlers in taking matters into their own hands eventually brought about recognition of their rights by state and federal governments. For example, the Iowa Territorial Supreme Court in 1839 upheld an act of the territorial legislature which declared that agreements between "squatters" as to rights to publicly owned land were valid even though federal law prohibited settlement on such land (4, p. 3). Later the Preemption Act passed by Congress in 1841 recognized the prior rights of settlers to the land where they had settled before survey had been made. Eventually the Homestead Act in 1862 made public land almost free to settlers.

Settlement of the country progressed to such an extent that by the latter part of the 19th century free land had practically passed from the Iowa as well as the national scene.

Passage of free land coupled with the passage of time meant transfer of farms by the original patentees to new owners. The transfer of farms was accompanied by the need for outside capital to help finance the owner-operator. Mortgage banks and later the Federal and Joint Stock Land Banks were developed in response to this need; and insurance companies extended their investment programs to provide such capital.

Rise of Tenancy as Form of Tenure

Non-owner operators were financed partially through leasing land owned by others. Thus, as public land passed into private hands, tenancy rose whereby some farmers secured control of land through renting it from the owners. As early as 1880, 23.8 per cent of Iowa farms were operated by tenants (4, p. 12).

Tenancy had a place in the tenure pattern in the country and in Iowa for several reasons. The man with limited resources could secure control of land thus and use his own resources for operating the farm. The young farmer could start sooner for himself than if he had tried to buy, and the able operator could secure control over a larger farm, if that suited his abilities, than he could by purchasing land.

As farm ownership became more difficult to attain, the tenancy rate increased both for the United States as a whole and for Iowa. By 1930 it stood at 42.4 per cent for the United States and 47.3 per cent for Iowa. In 1935 the figure for the United States had changed little, to 42.1 per cent; but for Iowa it had risen to 49.6 per cent according to the census (14 and 15).

There were sections of Iowa where the family type farm came to require heavy land investment, an investment the operator, in most cases, was in no position to make quickly. For example, the average value of family-type farm management units as determined by the Secretary of Agriculture in August 1946 was as high as $21,000 in such North Central Iowa counties as Humboldt, Pocahontas, and Calhoun.

At the same time, some farmers preferred to be tenants even though they could purchase farms, desiring to use their capital in other ways than to tie it up in land.

On the other side of the picture was found the investor who preferred to own land though he could not farm it. Retired farmers, doctors and others found land a desirable place for surplus funds.

Tenancy Rate and Farm Income

A high tenancy rate coincided with high income in Iowa. Tenancy became highest in north central and northwest Iowa, lowest in southern Iowa, while farm incomes followed the same general pattern. In other words, tenancy developed favorable features in the operation of Iowa farms.

Nonetheless, the urge to ownership persisted. It was so strong in Iowa and the country as a whole as to direct resources into promotion of land ownership, which might have been better used in promoting greater stability of tenure.

Tenancy had and still has a definite place in the pattern of agriculture both in Iowa and the rest of the country. The shift to increased mechanization by increasing the investment needed on a farm may be a further step in making ownership more difficult to achieve by those desiring that status.

Passage of Bankhead-Jones Tenant Purchase Act in 1937

Dissatisfaction with the high rate of tenancy on the nation's farms provided the impetus for passage of the Bankhead-Jones Tenant Purchase Act in 1937. The act provided funds for real estate loans up to 100 per cent of appraised value. This law represented an experimental step in the field of real estate credit for the express purpose of increasing the number of owner-operated family-type farms.

The agency assigned the task of administering the Bankhead-Jones Act was the Farm Security Administration. This agency was the successor to the Resettlement Administration which had been established by the Federal Emergency Appropriation Act of 1933.*

Under the latter act funds were made available to the states for direct and work relief. Part of the funds furnished to the states was earmarked for rehabilitation purposes and later administered through the State Rural Rehabilitation Corporations. The Comptroller General made an informal ruling that such grants were not permissible. Accordingly, the program became a direct Federal activity and agreements were reached with the State Rehabilitation Corporations whereby the Resettlement Administration, established April 30, 1935, by Executive Order No. 7027, took over the assets of the State Corporations for the purpose of carrying on a rural rehabilitation program in the various states involved (16, p. 961).

The Emergency Relief Appropriation Act of 1936 continued substantially the same program, and specifically authorized rural rehabilitation, loans and relief to farmers. It did not authorize the purchase of land though the Emergency Relief Appropriation Act of 1935 authorizing the purchase of land remained in effect until 1937.

The functions and duties of the Resettlement Administration were transferred to the Department of Agriculture on January 1, 1937, by executive order. The Emergency Relief Appropriation Act of 1937 authorized continuance of the rehabilitation program, including loans and relief, at the President's direction. The rules and regulations issued in 1935 and 1936 governing the Resettlement Administration were continued by executive order on June 29, 1937 (16, p. 962).

In July 1937 Congress passed the Bankhead-Jones Farm Tenant Act. That Act in Title I authorized the making of loans for the purchase of land and for making improvements thereon. These loans were to carry a three per cent interest rate and be amortized over 40 years. Title II authorized a rehabilitation loan program. Titles III and IV dealt with some of the Resettlement Administration's other activities.

Shortly after passage of the Bankhead-Jones Farm Tenant Act, the name of the Resettlement Administration was changed to Farm Security Administration by the Secretary of Agriculture. That administration was then assigned the duties provided for under Titles I and II of the Bankhead-Jones Farm Tenant Act, certain portions of Title IV and the functions previously carried on by the Resettlement Administration (16, p. 962). Thus, the Farm Security Administration was responsible for making loans to purchase land under the Farm Tenant Act and for making rehabilitation loans. Congress, about that time, began making appropriations for the specific use of the Farm Security Administration in carrying out its duties. This practice has been followed continuously since. However, the rehabilitation or standard loans were always provided for on a larger scale than real estate loans. The loans were serviced by essentially the same personnel.

Congress in 1941, for the first time, directed that no loan could be made under the Bankhead-Jones Farm Tenant Act for the purpose of purchasing a farm unit at a greater value than the average farm unit of 30 acres and more in the county where the purchase was made (16, p. 963). Previously there had been no limitation and the administration had used the family-type farm concept in making loans (9, p. 58).

Farmers Home Administration Established

Except for the changes in loan limit mentioned above, the provisions under which the Farm Security Administration administered the Bankhead-Jones Act remained substantially unchanged until 1946. In that year, Congress abolished the Farm Security Administration and set up the Farmers Home Administration to handle such Farm Security Administration duties as were continued. One of them was the subject of this study, the making of loans for the purchase of farms by certain individuals who qualified under the regulations established by Congress.

Eligible borrowers

The 1946 law specifically provided that: "...only farm tenants, farm laborers, sharecroppers and other individuals (including owners of inadequate or under-improved farm units) who obtained, or had recently obtained, the major portion of their income from farming operations, shall be eligible to receive the benefits of this title"

(17, p. 12). The law, however, then proceeded to make this specific exception to the above definition of eligibility:

> Any veteran (defined herein as a person who served in the land or naval forces of the United States during any war between the United States and any other nation, and who shall have been discharged or released therefrom under conditions other than dishonorable) who intends to engage in farming as a principal occupation, and who meets the requirements of rules and regulations prescribed by the secretary as to industry, experience, character and other assurances of success as farmers shall be eligible... and their applications shall be entitled to preference over those of non-veterans. (17, p. 13)

<u>Interest rate and term</u>

The interest rate was changed to $3\frac{1}{2}$ per cent by the 1946 law. The amortization period was left at 40 years.

<u>County committees</u>

County committees, already a part of the system, were continued by the 1946 law for the purpose of examining applications for loans and examining farms with respect to which applications were made. If the committee found the applicant eligible and the farm acceptable, it was to so certify to the Secretary. The committees also were directed to certify as to the fair and reasonable value of the farm based on its normal earning capacity (17, p. 13-14).

Loan limit

The 1946 act discontinued the provision limiting loans to farms whose value did not exceed the average value of all farms in the excess of 30 acres in the county where the loan was made. The act substituted as a loan limit, in a county, the average value of family-type farm management units in that county as determined by the Secretary. Farm Security Administration had a $12,000 administrative limit on loans and this remained unchanged after passage of the 1946 act.

The administrative limit of $12,000 on loans was justified by Farmers Home Administration officials on the grounds that the program was not conceived as a means of establishing farmers on the very best farms with public funds and that a $12,000 farm, on the basis of normal agricultural value, is sufficient for an efficient family-type unit. The Farmers Home Administration felt it should not use available funds on a few large loans but should spread the money over a large number of smaller ones. The $12,000 limit was established at the national level and applied to the entire country.

Insured loans

The 1946 act provided for the first time that the Secretary could insure loans of the type and for the purpose described above when made by other lenders. The same procedure was to be used in determining eligibility; the interest rate was the same, $3\frac{1}{2}$ per cent; and the same supervisory assistance was to be given these borrowers as direct borrowers. The Secretary was instructed to collect the payments from the borrowers, retain 1 per cent to cover administrative costs and losses and remit the balance, $2\frac{1}{2}$ per cent, to the lender. In case of default, the Secretary was instructed to pay such defaulted payment to the lender 30 days after such default. In case the default extended beyond one year, the Secretary was empowered upon the lender's application, to take over the loan, paying the lender in full.

The law provided for establishing an insurance fund and stipulated that insured loans could not exceed $100,000,000 in any one fiscal year.

Supervision

The 1946 act provided that farm and home management assistance or supervision should be provided borrowers from Farmers Home Administration in the same manner as such assistance was provided under the Farm Security Administration.

Eligibility

Eligibility was made by law, for the first time, to depend on inability to secure credit on reasonable terms from other sources. This requirement caused no change in policy since the inability to secure credit elsewhere on reasonable terms had been an administrative requirement of eligibility for FO loans prior to 1946.

The 1946 act also went a step farther and provided that loans made by the Farmers Home Administration must be refinanced with other agencies as soon as the borrowers could be granted loans on reasonable terms by such agencies.

Farm development loans

Authority was specifically provided for making farm development loans. This type loan was made previously only during the year ending June 30, 1942.

Allocation of funds

Until 1945, loan funds for financing farm purchases were allocated by law on the basis of farm tenancy and population. Half the $50,000,000 appropriated in 1945 was earmarked for loans to veterans and distributed on the basis of need. The other $25,000,000 was for non-veterans and was distributed as before (18, p. 3-4). The 1945 method was continued in 1946 and extended to the insured loans as well.

Terms on loans to purchase farms

Prior to November 1946 loans to purchase farms under the authority described above were made at three per cent and amortized over 40 years. This made the annual payment equal to 4.326 per cent of the face of the loan. The 1946 act changed the interest rate to $3\frac{1}{2}$ per cent but left the amortization period unchanged.

Each farm on which a loan was sought was appraised by an appraiser in the employ of the Farmers Home Administration. This appraisal was based on normal agricultural value of the farm and showed the farm's value as a farm unit. If buildings and land required improvements or repairs before the farm could be termed a farm unit, the condition was noted by the appraiser. An engineer's report showing needed improvements and repairs, together with the estimated cost, accompanied the appraiser's report.

The appraiser's and engineer's reports were available to the County Committee when it took final action recommending the loan to the Secretary. The committee designated the repairs and improvements to be included in the cost of the farm and, finally, put a reasonable value on the farm. This value was in reality a second appraisal and could differ from that of the FHA appraiser.

<u>Use by FHA of repayments on loan</u>

Repayments on loans made from direct appropriations reverted to the Treasury of the United States prior to 1941. Repayments after that date were applied on funds borrowed from the Reconstruction Finance Corporation. When the RFC was repaid, repayments were again to go into the United States Treasury.

Definitions

Since differences in the name under which the Farmers Home Administration has operated may cause confusion, the following explanation is made:

Farmers Home Administration or FHA shall be understood to mean Farm Security Administration when used for the years 1935-46, or Rural

Rehabilitation Administration when used for the period prior to 1935. The initials FHA will be used for convenience at times and is not to be confused with the better known federal agency with the same initials, the Federal Housing Administration. This latter agency will not be referred to in the study.

The term Farm Ownership Program or FO Program or the Program for Farm Ownership borrowers shall be used synonymously with and in place of Tenant Purchase Program, or TP Program, or Tenant Purchase borrowers. In any case, the two sets of designations will be considered as being synonymous since they refer to essentially the same program.

REVIEW OF LITERATURE

The scant data available dealing with the Farm Ownership Program are confined chiefly to descriptions of the Program's operation to date. These reports are factual in nature with little interpretation of the type undertaken in this study.

Alexander (1) in a study of Farm Ownership borrowers in Louisiana confined her investigations to such things as the age and color of the operator, size of farm, size of loan, amounts due and paid on loans, and years of schooling of borrowers. The study described rather completely the borrowers and their farms in the areas studied. No inquiry was made into the reasons for the program's results or how it might work in the future.

Dillard B. Lasseter, Administrator of FHA, in his annual report of the agency's activities for 1945-46, confined himself to factual presentation of loans made, repayments by borrowers, and similar data (19).

The 1944-45 annual report of the Farm Security Administration went into some detail on functioning of county committees, assistance to veterans, assistance to family development and other relevant matter (18).

The Select Committee of the House Committee on Agriculture to investigate the activities of the Farm Security Administration secured a special report from the agency covering its operation from 1937 to 1943. Contained therein is a history of the Farm Ownership Program together with a statement on the price limitation under which loans were made and statistical tables setting forth facts concerning operations (16, p. 1010-1025).

Various other official reports of the Farmers Home Administration concerning the FO Program available to the author contained only statistical information, chiefly pertaining to active Farm Ownership borrowers only. Some of this material was used for comparative purposes in the study but did not lend itself to the type of analysis to be used in this study.

A number of studies have been made dealing with the rehabilitation loans made by FHA. These studies contribute little to a study of the FO phase of the agency's activities since the loans were for a different purpose and the borrowers under the two programs were not strictly comparable. Rehabilitation loan studies had most value as background material since the same personnel handled the two types of loans in county offices.

PURPOSE

With increased lending power available, counting the indirect power through the insurance feature, and in view of certain liberalizing features mentioned previously, there is a possibility the FO Program will expand at some future time. For this reason it has seemed desirable that an examination be made of the Program's operations to date.

It is the aim of this study to investigate the Farm Ownership Program's accomplishments as seen in Iowa (1) to determine, if possible, strong and weak points, and (2) to develop recommendations concerning future operations.

This study will consider the program's effectiveness in achieving the goal for which it was established, i.e., to assist the non-owner, as defined, to become an owner-operator. This will be done by examining (1) actual results as they occurred, (2) the probable results under cost and price relationships at an early wartime level and (3) the probable results under near depression conditions.

It is recognized that the funds available have not been sufficient in total for the agency to make large numbers of loans in relation to the total number of tenants.

The evaluation of ownership as a goal compared with some other form of tenure was not a part of this study. Such an evaluation was considered to require a separate study.

SOURCE OF DATA AND METHOD OF PROCEDURE

The basic data for this study were taken from the files of the Farmers Home Administration, Iowa State Office, Des Moines, Iowa, where a file was kept for each loan made until the loan was paid in full. Paid up files were sent to the regional office yearly on July 1. Duplicate files were kept in county offices and were drawn upon when needed for the study.

The files included the original application which contained, among other things, a net worth statement. The files also included an appraisal report of the farm; an engineer's report concerning necessary building repairs; the county committee's certification setting forth the reasonable value of the farm, option price, cost of necessary improvements of both building and land, incidental fees, and size of loan recommended; annual income returns for each year after the farm was occupied under the program; and, in case of paid-up borrowers, the source of income for final payment. When annual income reports or any file were missing from the state office, a duplicate was secured from the proper county office.

Farm visits were made to 15 borrowers in Dallas, Guthrie and Greene counties to secure a better understanding of the problems faced by the borrowers.

To insure that the borrower had operated at least one year as a borrower under the FO Program, it was decided to include in the study only those loans made prior to July 1, 1946. There were 921 borrowers involved for the period July 1, 1937, through June 30, 1946 (see Table 1). This group was too large to study in its entirety and it was decided to use a sample instead.

Table 1. Farm ownership loans in Iowa by year made

Year ending June 30	Number
1938	36
1939	85
1940	152
1941	196
1942	194
1943	140
1944	83
1945	30
1946	5
Total	921

Source: Farmers Home Administration, Iowa State Office, Des Moines, Iowa

A preliminary sample of 15 loans was drawn from the files to secure an estimate of the size sample needed for the study and to see if some type of stratification was desirable. Upon completing this preliminary survey, examining the data, and consulting those intimately acquainted with the program's operation, it was decided that only stratification by size of loan was warranted. Such stratification was deemed advisable because of the skewed distribution of the statistical population (the upper one-fifth of all loans made lay between $11,000 and $12,000, while the lower fifth covered the range

$2,250 to $6,625). It was known that nearly all loans were at 100 per cent of cost and that the appraisal methods used had been relatively stable throughout the period. The borrowers had been selected by the county committees on much the same basis from year to year. Thus it appeared that a small sample would be representative of the population, and a sample of 50 was selected. In order to achieve stratification, the total number of loans were divided into five equal groups on the basis of size and 10 cases were drawn at random from each group.

Description of Sample

The sample of 50 cases was drawn from loans made in years ending June 30, 1938, through June 30, 1946. Although loans were made in 1945 and 1946 their numbers were few and no cases from those years were drawn in the sample.

When the desired stratification was achieved the following loan classes resulted: $2250-$6625; $6626-$8380; $8381-$9615; $9616-$11000; and $11000-$12000. To determine these classes the loans were arrayed and divided into five equal groups. It so happened that the break between the fourth and fifth classes fell at $11,000 and both classes included some loans of that size. The $11,000 loans needed to complete the class beginning at $9,616 were selected at random from all $11,000 loans.

The cases in the sample were distributed among 36 counties of the state and were from all sections where loans were made. No county contributed more than three cases to the study (Chart I).

Active Borrowers Included in this Study
Compared with All Active Borrowers

In appraising the sample, certain characteristics of the 43 borrowers active as of December 31, 1945, were compared with the findings of an FHA study (19) of 130 borrowers active as of that date (Table 2). While 43 of the 50 cases in the sample were active on December 31, 1945, 848 of the total loans made by that date (approximately 921) were active. The sample of 130 active borrowers drawn for the FHA study was used to make estimates concerning the 848 active loans. The comparison which is made here is a comparison of estimates for active borrowers made by the sampling procedure used in this study and the sampling procedure used by FHA. The average size of farm and number of crop acres per farm for the 43 borrowers active December 31, 1945, in the sample drawn for this study were almost identical with those shown for active borrowers by FHA. The mean size of loan to active borrowers in this study was slightly greater ($132) than that shown by FHA for active borrowers. Too, the net worth before acceptance, cash farm income in 1945, and cash living expense in 1945 for the active borrowers included in this study were slightly greater than those reported by FHA for active borrowers. However, the chattel inventory at the end of 1945, value of home-used products and farm operating expenses in 1945 for active borrowers as

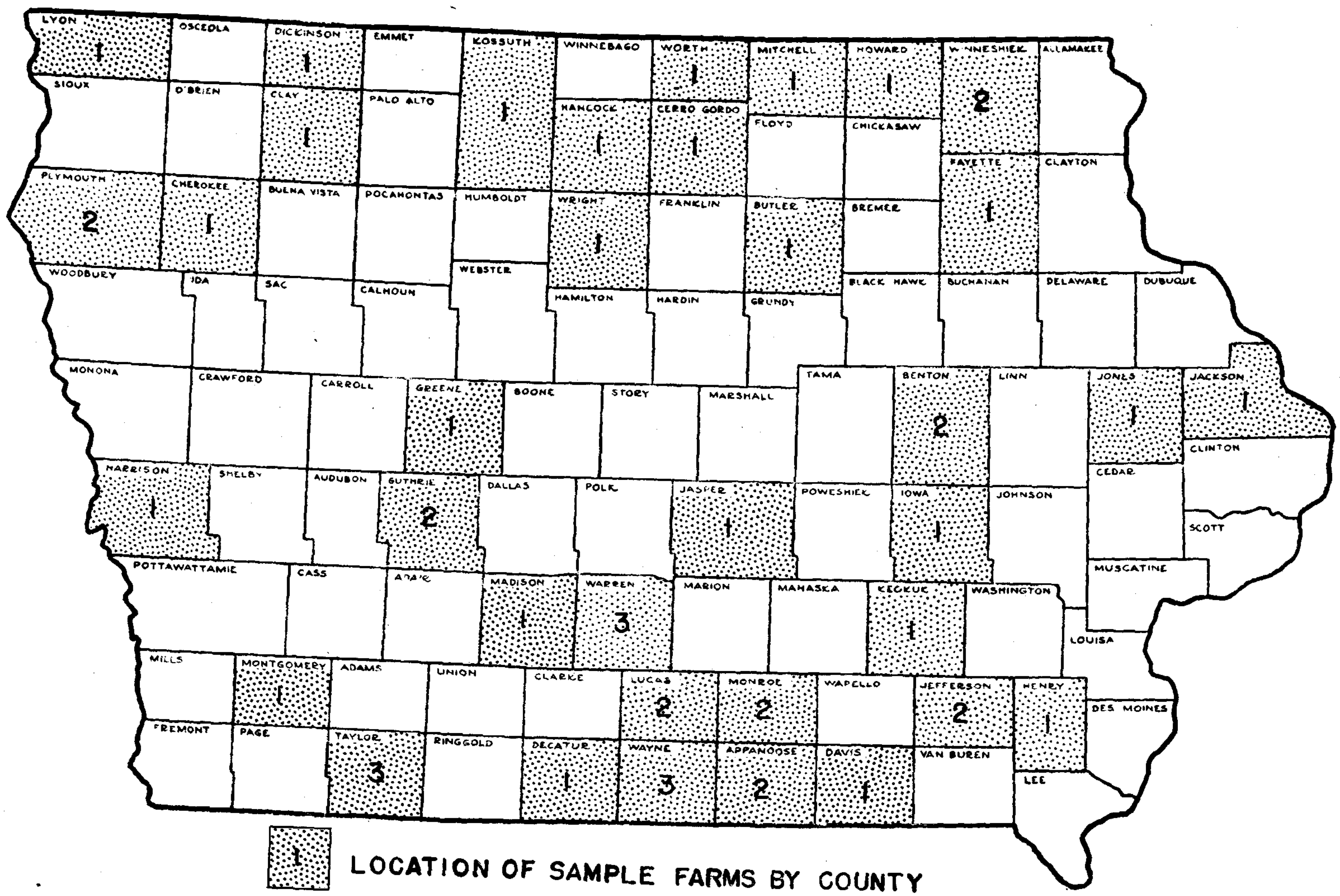


CHART I IOWA FARM OWNERSHIP PROGRAM SAMPLE reported by FHA were slightly greater than for those in this study. For no item was the difference in excess of five per cent of the figure shown for the 43 active borrowers in this study.

Table 2. Size of farm, size of loan and other data for borrowers in Iowa as shown by this study and by an FHA study, December 31, 1945

	FHA[a] study	This study
No. of active borrowers, December 31, 1945	130	43
Acres operated per farm in 1945	155	157
Acres in crops per farm in 1945	98	99
Size of loan (arithmetic mean)	$8925	$9057
Net worth before acceptance	3281	3373
Chattel inventory, end 1945	6106	5983
Net worth, end 1945	10239	9768
Cash farm income, 1945	5606	5660
Value of home used products, 1945	512	488
Cash family living expenses, 1945	1137	1169
Farm operating expenses, 1945	2447	2357

[a]As shown in USDA Farmers Home Administration "Status of the Tenant Purchase Family in 1945". An administrative report based on a sample of 130 active borrowers drawn from the 848 loans active in Iowa on December 31, 1945. The FHA sample was drawn in a different manner than the sample for this study. The FHA sampled only active borrowers in the state and the sampling procedure was based on gross family income.

Average Size Loan for All Loans in Sample

The entire sample of 50 could not be compared directly with any other data except for average size of loan. The average shown by the sample was $8,985. The FHA reported the average size of all 921 loans made in Iowa through June 30, 1946 was $8,898.

Treatment of Data

The annual income reports in the files showed cash farm income; cash farm expense; cash family operating expenses; capital expenditures, both farm and household; year end net worth, and year end chattel inventories (feed, livestock and machinery). The writer combined the information as follows in order to carry on the investigation in the desired manner.

(1) Income was computed on an accrual basis using cash income and inventory changes of feed and livestock.

(2) Livestock purchases were deducted from income as computed in (1) above. The remainder was designated gross income for this discussion. The deduction was made to secure an estimate of gross physical production. Net income on a dollar basis was not affected by this procedure, but adjusted net income (see (7) below) was.

(3) Expenses were determined by adding cash fixed expenses to cash operating expenses. Depreciation was not available.

(4) Net income was the difference between (2) and (3).

(5) Income and expenses on all sample farms were adjusted to a 1941 base using indexes adapted from the U.S. Department of Agriculture applying to Iowa (Table 3). Income on the 1941 base was adjusted to a level 15 per cent below 1941 to observe effects of depression conditions.

Table 3. Index of prices received and paid by Iowa farmers, 1939-1946
1941 = 100

Index	1939	1940	1941	1942	1943	1944	1945	1946
Prices received[1]	74	77	100	129	147	142	150	183
Prices paid[2]	94	94	100	112	121	127	129	140

[1]As computed from index on the 1909-14 base reported by the Iowa Crop and Livestock Reporting Service, U.S. Department of Agriculture and Iowa Department of Agriculture cooperating.

[2]Prices paid for items used in production excluding livestock. Adapted from indexes using the 1910-14 base reported by the Iowa Crop and Livestock Reporting Service, U.S. Department of Agriculture and Iowa Department of Agriculture cooperating.

(6) The index of prices paid for items used in production on Iowa farms was recomputed excluding livestock (Table 3). Data for this computation were obtained from the office of the statistician, Iowa Crops and Livestock Reporting Service, Des Moines, Iowa.

(7) Adjusted net income was the difference between adjusted gross income and adjusted expenses.

(8) In order to see what would happen if prices received declined while costs remained constant until parity was reached, the 1946 index of prices received on the 1909-14 base was reduced from 242 to 195 while the index of prices paid, which stood at 195 for 1946 on the 1910-14 base, was left unchanged.

Conditions similar to this have occurred in the past following periods of rapid price rises such as existed in the period covered by this study.

(9) Expenses and net income on the adjusted basis were computed as a percentage of adjusted groww income both for individual borrowers and for the average of borrowers beginning operations under the program in a particular year. The adjustment was made to secure an indication of the sample farmers' ability to control costs.

The writer recognized in applying the indexes shown above that some error was introduced when indexes computed on a state basis were applied to data for individual farms. These indexes were the only ones available and the alternative was to compute indexes for each farm, a process which was believed to have greater possibility of error than that introduced by applying the state index.

The author further recognized that had a less favorable relation existed between prices received and paid, the same volume of production would not have existed on the sample farms as did exist.

(10) Family expenditure data for 13 families with records for both 1941 and 1946 were compared by deflating the 1946 actual expense to a 1941 base using the Bureau of Labor Statistics U.S. Consumer Price Index (1935-39 = 100).

(11) Family expenditure data as adjusted to 1941 in (10) were placed on a per capita basis after computing Consumer Cost Units for the 13 families for the years 1941 and 1946.

When the analysis was made the author recognized that family living expenditures were partially a function of net income and would have been different under other economic conditions than those existing during the years in question.

FINDINGS

The Farm Ownership program began in Iowa during the year ending June 30, 1938. No loan closed during that year resulted in possession of the farm by the borrower until 1939. Consequently, the first income reports by borrowers in the state were for 1939.

Appraisals

Two appraisals were made on each farm on which farm ownership loans were made in Iowa. The first was by an FHA appraiser, the second, designated reasonable value, was made by the county committee in the county where the farm was located. The FHA appraiser's valuation was available to the county committee but was not binding upon it. Thus, there was an opportunity for divergence between the values determined in the two appraisals.

On the whole, the two appraisals did not differ to any marked degree (Table 4). The small divergence could be explained because the county committee placed a slightly different emphasis on the amount and value of improvements and repairs to be provided for prior to closing the loan than the FHA appraiser did and by the weight placed upon the family going on the farm. The county committees could consider the latter factor while the FHA appraiser could not.

Table 4. Appraised value and reasonable value, 50 farms purchased with farm ownership loans 1939-1944

Year	Number	Appraised value	Reasonable value	Reasonable value as per cent of appraised value
1939	5	$ 9044	$ 9204	101.8
1940	9	10178	9982	98.1
1941	8	9394	9538	101.5
1942	14	9211	9317	101.2
1943	8	8000	8406	105.1
1944	6	10350	10180	98.4
Total	50	9340	9418	100.8

The evidence available from this study indicated that the county committees were no more influenced by current prices and production in Iowa than were the Iowa FHA appraisers, who appraised on the basis of "normal", or long run average prices and production. Iowa county committees' record on making appraisals as shown by this study appeared to justify the appraisal responsibility placed upon the committees by the 1946 law.

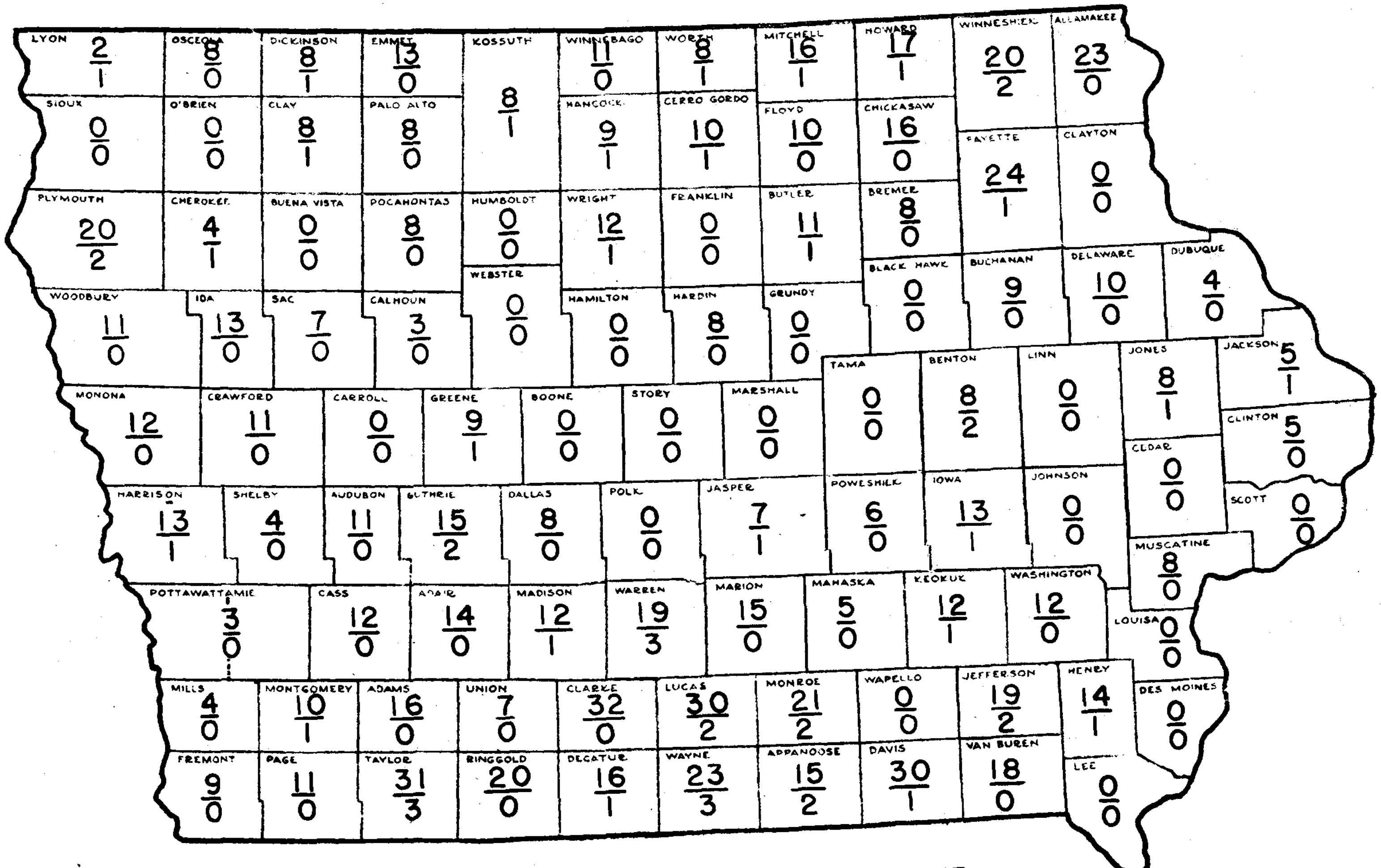
Time Required to Close Loans

Considerable time elapsed between the application for a loan and its final approval. After the county committee had decided that the family was acceptable, the applicant had to secure an option on a farm at a price which, with the added cost of necessary improvements and repairs, would not exceed the county committee's reasonable value for the farm. This was sometimes time-consuming. Secondly, the farm had to be appraised and an engineer's report prepared, and finally, all questions of title had to be cleared. Occasionally, the agency's funds would have been depleted for that fiscal year and some applicants might have to wait until the next year. Thus a multitude of things could cause delay.

In the present study the shortest time between application and closing the loan was 46 days, the longest 349, the mean 132. Technicalities appeared to have lengthened the time required in some cases. For example, the borrower whose loan closure required 349 days had possession of the farm for some time prior to final closing. At least, he was shown operating the farm the year the loan was closed even though the closing date was September 26. The usual date of possession on the farms in this study was March 1 and there was nothing in the file to indicate this man failed to secure possession at the usual time even though the closing was delayed. The preponderance of closing dates fell in January, February and March, reflecting the time that possession could be obtained.

Loan Size

Loan size in Iowa was limited by the administrative or the legal limit, whichever was the smaller. For practical purposes, the administrative limit excluded 24 Iowa counties from the list of those where loans were made prior to June 30, 1946 (See Chart II).



5/1 COUNTIES IN WHICH SAMPLE FARMS LIE
upper figure: number of loans made
lower figure: number of loans in sample

CHART II IOWA FARM OWNERSHIP LOANS BY COUNTIES (thru June 30, 1946)

During the early years of the program there were many farms for sale at reasonable prices—enough so that many "good buys" appeared judging from information obtained while gathering data for the sample. This situation changed as land prices rose (Table 5) and can scarcely be counted on again in the near future. Its recurrence may be so infrequent as to limit operations in the more fertile sections of Iowa.

The legal limit could have been too low, e.g., in a county of predominantly small or low value units, the average value of farms might be too small to allow establishing an efficient family type unit under this limitation. The lowest average in any Iowa county since the program started was for Davis county, where the average as defined in the law prior to 1946 stood at $5,193 while the highest average, $21,081, was in Humboldt county. The 1946 law changed the method of computing the legal limit with the result that the lowest limit became $9,500 in four counties, including Davis. The highest average became $21,000 in four counties including Humboldt. For the whole state, there were only 12 counties where the new average stood at $12,000 or less (Table 6).

The mean size loan for all of the farms drawn in this sample was $8,985, while the median stood at $9,237. The author was informed that the mean for all loans made through June 30, 1946, stood at $8,898. The median for all loans was not available.

Table 5. Iowa farm real estate values
1912-1914 = 100

Year	Value per acre	Index
1912	$ 115	96
1913	118	99
1914	124	104
1915	134	112
1916	153	128
1917	160	134
1918	174	145
1919	192	160
1920	255	213
1921	235	197
1922	194	162
1923	186	156
1924	171	143
1925	162	136
1926	155	130
1927	145	121
1928	140	117
1929	139	116
1930	135	113
1931	117	98
1932	96	80
1933	69	58
1934	75	63
1935	80	67
1936	87	73
1937	87	73
1938	88	74
1939	88	74
1940	88	74
1941	89	75
1942	95	80
1943	104	87
1944	121	101
1945	128	107
1946	144	121
1947[1]	160	134

Source: U.S. Department of Agriculture. Value of all farm lands with improvements.

[1] Preliminary.

Table 6. County price limitations for FO loans in Iowa as established by the Secretary of Agriculture, August 6, 1946

County	Price limitation	County	Price limitation
(1) Adair	$ 13,500	(51) Jefferson	$ 13,000
(2) Adams	13,000	(52) Johnson	16,000
(3) Allamakee	12,500	(53) Jones	15,000
(4) Appanoose	9,500	(54) Keokuk	14,000
(5) Audubon	15,000	(55) Kossuth	18,500
(6) Benton	19,000	(56) Lee	12,000
(7) Black Hawk	17,000	(57) Linn	15,000
(8) Boone	18,000	(58) Louisa	14,500
(9) Bremer	14,000	(59) Lucas	10,000
(10) Buchanan	14,000	(60) Lyon	18,000
(11) Buena Vista	19,500	(61) Madison	13,500
(12) Butler	15,500	(62) Mahaska	15,000
(13) Calhoun	21,000	(63) Marion	12,500
(14) Carroll	18,000	(64) Marshall	18,000
(15) Cass	15,000	(65) Mills	17,000
(16) Cedar	18,000	(66) Mitchell	15,500
(17) Cerro Gordo	17,000	(67) Monona	15,000
(18) Cherokee	18,500	(68) Monroe	9,500
(19) Chickasaw	12,500	(69) Montgomery	15,500
(20) Clarke	11,000	(70) Muscatine	16,000
(21) Clay	19,500	(71) O'Brien	21,000
(22) Clayton	14,000	(72) Osceola	17,500
(23) Clinton	15,000	(73) Page	15,000
(24) Crawford	15,500	(74) Palo Alto	18,000
(25) Dallas	16,000	(75) Plymouth	16,500
(26) Davis	9,500	(76) Pocahontas	21,000
(27) Decatur	10,000	(77) Polk	16,000
(28) Delaware	15,000	(78) Pottawattamie	16,000
(29) Des Moines	14,000	(79) Poweshiek	16,000
(30) Dickinson	17,000	(80) Ringgold	11,500
(31) Dubuque	14,500	(81) Sac	19,000
(32) Emmet	17,500	(82) Scott	18,000
(33) Fayette	13,000	(83) Shelby	16,500
(34) Floyd	15,500	(84) Sioux	18,500
(35) Franklin	18,000	(85) Story	18,500
(36) Fremont	17,000	(86) Tama	17,000
(37) Greene	19,000	(87) Taylor	13,000
(38) Grundy	21,000	(88) Union	12,000
(39) Guthrie	14,000	(89) Van Buren	9,500
(40) Hamilton	19,500	(90) Wapello	11,000

Source: Farmers Home Administration, Des Moines, Iowa.

Table 6. (continued)

County	Price limitation	County	Price limitation
(41) Hancock	$ 18,000	(91) Warren	$ 13,500
(42) Hardin	18,500	(92) Washington	16,000
(43) Harrison	13,500	(93) Wayne	11,000
(44) Henry	14,000	(94) Webster	19,000
(45) Howard	10,000	(95) Winnebago	16,000
(46) Humboldt	21,000	(96) Winneshiek	13,000
(47) Ida	17,500	(97) Woodbury	14,000
(48) Iowa	16,000	(98) Worth	14,500
(49) Jackson	14,000	(99) Wright	19,500
(50) Jasper	14,000		

Down Payments on Farms

The farms in the sample cost, on the average, $9,031, which in comparison with the sample average size loan of $8,985 indicated an average down payment of $46 was made. Only eight made any down payment, however (Table 7). Six cases accounted for practically all the total down payments made by the 50 borrowers. Only one borrower in the sample made what was a relatively large down payment, $1,000, although this was less than 10 per cent of the cost of his farm. Judging from the information obtained in this sample, size of loan and cost of farms bought under the program in Iowa could be considered identical.

Table 7. Distribution of down payments on farms bought under FO program Sample of 50

Number	Amount of down payment
42	$ 00
1	5
1	25
3	200
1	235
1	430
1	1000

Cost and Reasonable Value

The average cost of farms to the purchaser for any one year never fell below 93.7 per cent of the reasonable value (Table 8). On an individual basis only four farms cost less than 90 per cent of reasonable value, and these same four were the only ones on which loans were less than 90 per cent of reasonable value.

Table 8. Cost and reasonable value, farm ownership sample farms, 1939-1944

Year	Number of farms	Reasonable value	Cost	Cost as per cent of reasonable value
1939	5	$ 9204	$ 8854	96.4
1940	9	9982	9382	94.4
1941	8	9538	9260	97.1
1942	14	9317	9002	96.6
1943	8	8406	7878	93.7
1944	6	10180	9952	97.8

Insurability of Loans

The few loans made at less than 90 per cent of reasonable value raises a question concerning the number of loans which could be insured by FHA in Iowa for the 1946 law states in Sec. 12 (5) that for insured loans, "The principal obligation (and fees and other charges chargeable under subsection (e) of this section) shall not exceed 90 per centum of the reasonable value of the farm and necessary repairs and improvements thereon, as such values are certified by the county committee pursuant to section 2(b)" (17, p. 16).

Further doubt was raised concerning the number of loans that could be insured by the following provision of the law in Section 3a "...loans may not be made for the acquisition or enlargement of farms which have a value, as acquired, enlarged or improved, in excess of the average value of efficient family-type farm management units, as determined by the Secretary, in the county, parish, or locality where the farm is located" (17, p. 14). The writer understands that the same relation held between the reasonable value and the administrative limit on loans where this limit was in force instead of the legal limit mentioned above. One of the four loans mentioned earlier costing less than 90 per cent of reasonable value had a reasonable value of $16,500. Under the section of the 1946 law quoted, a loan could not have been made, or insured, on this farm. Thus the data showed that not more than three of the 50 loans studied could have been insured by FHA if the 1946 insurance provision had been in effect at the time the loans were made.

The 1946 law provided for a maximum appropriation of $50,000,000 for direct loans and for insurance of $100,000,000 worth of loans in addition. The quotas by states were to be determined in the same manner for direct and insured loans. On that basis, Iowa's quote of insured loans in dollars would be twice its quota of direct loans.

Data in this study indicated the quota of insured loans could not be filled by original loans made for the purchase of farms for too few farmers had the down payment necessary to bring the loan to 90 per cent of the appraised value. However, the insurance provision created the opportunity of shifting FHA borrowers to other lenders under an insured loan as soon as the equity became sufficient to make the loan insurable (17, pp. 8, 15).

The shift might not be practical, however, as a borrower might not care to have his loan shifted, particularly since he could expect still another shift as soon as his equity in the farm became large enough to qualify him for a non-insured loan from lenders other than FHA. The latter transfer is mandatory under the law.

Improvements Cost and Total Cost of Farms

Improvements and repairs on farms purchased under the program were an important part of total cost. While the average total cost of all farms in the sample was $9,031, repairs and improvements represented $ 1,345, or 14.9 per cent. The amount of repairs and improvements on individual farms varied widely as shown by the standard error of the mean, $826, and the range of $50 to $4,600.

Option Price and Improvements

Option price provided a rough appraisal of the farm prior to addition of improvements. While examination of the data indicated option price and value of improvements and repairs added were negatively correlated, there was no way to test whether such correlation or any correlation existed. The upper limit on loan size effectively limited the amount of repairs and improvements which could be added.

since the sum of these plus the option price could not exceed the loan limit unless the difference were made up by a down payment. Down payments were few and, for practical purposes, loan size and cost were equal. Hence the nearer the option price on a farm approached the loan limit, the less the amount that could be spent on improvements and repairs.

Although the loans included funds for improvements and repairs so that the farm would be placed on an operating basis, there apparently was much work left to be done to place the farms in a satisfactory operating condition. Farm visits in Dallas, Greene and Guthrie counties indicated only the most pressing problems were alleviated at the time of purchase and the farms were often still below average condition for their communities. That is, the farms purchased under the program were often badly run down due to past ownership and all that FHA could do was to remedy the outstanding problems so the farm could be purchased. At the same time, FHA tried to secure borrowers who would take pride in their farms and tried to instill in the borrowers a desire to keep up their farms and homes.

As a result of these two factors, the run down condition of farms purchased and the desire by the borrowers to attain and maintain a well kept farm, much labor unproductive in terms of monetary income had to be put in on the farm by the borrower after purchase. Two sample farms in Guthrie County were among those visited. One of the operators was consistently high man among the borrowers in the county according to the supervisor. This man recited to the author a long list of clean-up, patch-up jobs he had had to do on his place even though FHA placed $1,575 in improvements when the farm was bought in 1943. He believed he had barely brought his farm up to an average condition even after four years of removing debris and brush, fighting weeds, removing ramshackle buildings, repairing fences, combating erosion and improving his home. The other Guthrie County farm in the sample where $1,975 was put into buildings by FHA, told a similar story. So too did the other non-sample borrowers visited.

As mentioned above, the effort required to overcome past neglect was an important drain on labor resources among FHA borrowers and was labor which brought in little or no monetary return. The accomplishment made using labor for improving the farms needs to be recognized, even though the accomplishment cannot be measured quantitatively or shown in an income statement.

Size Loan on Paid-up Farms

Fourteen of the 50 loans included in this sample had been paid in full when the files were examined March 31, 1947. The median size loan to these 14 borrowers was $10,092 compared with the median of $9,270 for all 50 loans studied.

Applications Exceed Loans

Many more men applied for farm ownership loans in Iowa than could be granted loans. Great numbers of applications were filed whenever funds were available (Table 9). The consensus expressed to the author by FHA officials was that in the earlier years lack of funds prevented the making of loans to a large number of men who were acceptable personally and could have obtained farms involving loans within the limitations. As land prices rose, cost of farms became the limiting factor rather than loanable funds or qualified borrowers.

Table 9. Applications and number of FO loans in Iowa, 1938-1946

Year ending June 30	Applications	Loans
1938	579	36
1939	946	85
1940	3289	152
1941	4011	196
1942	5626	194
1943	2864	140
1944	1462	83
1945	1279	30
1946	605	5

Source: Farmers Home Administration.

The important point brought out in the inquiry mentioned above was this: The number of applicants the county committees considered acceptable for loans always exceeded the number of loans that could be made. It was impossible to secure a quantitative measure showing the extent of the excess. The best estimate the FHA officials could make was that at the height of demand for loans at least two qualified men had to be turned away for each man who could be granted a loan. These men failed to secure loans for one or the other of the reasons mentioned. The estimate is only for the area in which loans were made and it must be remembered loans were made in only a few counties in any one year and not at all in 24.

Reaction of Borrowers

Some borrowers were dissatisfied with the program according to the records examined and some borrowers sold out or refinanced for that reason. While four of the 14 who had paid in full by March 31, 1947, did so partly because they were dissatisfied, there may have been others of the 14 who did so but whose reasons did not appear in the records.

One source of dissatisfaction given in the records examined was failure to mesh into community life, a difficulty which arose among borrowers who went into a new community to buy a farm.

Annual Payments on Loans

Annual payments on three per cent, 40-year loans equalled 4.326 per cent of the original loan. When the annual payment was deducted from net income as calculated for this study, the balance was the amount available to cover family living costs and depreciation and to make additions to capital in excess of principal payments included in the annual payment. Of the sample, 22 loans were active in 1941, a moderately prosperous year for agriculture in Iowa judged by the net income available to the average Iowa farmer (Table 10). The index of prices received by Iowa farmers in 1941 stood at 132 on the 1909-14 base.

Table 10. Average realized net income of Iowa farm operators per farm from agriculture and government payments, 1939-1945

Year	Net income
1939	$ 1383
1940	1510
1941	2141
1942	3355
1943	4513
1944	3856
1945	4465

Source: U.S. Department of Agriculture, Bureau of Agricultural Economics.

Twenty of the 22 borrowers had more than $1,000 net income in excess of the annual payment to cover family living costs and depreciation; 19 of the 20 had more than $1,500 net income above their annual payments for the same purpose. Family living costs in 1941 averaged $614 for the 22 families.

There were 39 income reports for 1946 operations. When the income and expenses on those reports were adjusted to the 1941 base and annual payments deducted, 20 of the 39 had net incomes in excess of $1500, 10 had net incomes ranging from $1,000 to $1499 and eight had net incomes of less than $1,000. (Table 11). On the basis of 1941 prices and costs these eight were on the danger line since they had less than $1,000 to cover living costs and depreciation.

Table 11. Adjusted net income (1941 base) in excess of annual payments 39 borrowers 1946

Dollars	Farms first reporting in 1939, 1940 and 1941	Farms first reporting in 1942, 1943, and 1944	All reports
0- 499	0	3	3
500- 999	0	5	5
1000-1499	2	8	10
1500-1999	4	4	8
2000-2499	5	3	8
2500 & over	2	3	5
Total	13	26	39

Assuming that parity[1] prices had existed in 1946 what would have remained as net income to these borrowers above their annual payments?

The index of prices received by Iowa farmers stood at 242 (1909-14= 100) for 1946 and the index of prices paid as computed for this study stood at 195 for 1946 (1909-14 = 100). When gross income was adjusted by reducing the prices received index to parity with the index of prices paid, the net incomes which remained in excess of annual payments were as follows: 12 had $3,000 or more net income in excess of their annual payments, nine had $2,500 to $2,999 excess, eight

[1] Parity in the generally accepted sense is the equality of the index of prices received as compared with the index of prices paid, both on 1909-14 base. That is, when the two indexes are equal, parity exists.

had $2,000 to $2,499 excess; three had $1,500 to $1,999 excess; four had $1,000 to $1,499 excess and three had from $500 to $999 excess. The 10 who showed net incomes of less than $1,500 in excess of annual payment would have had small chance of maintaining or increasing their living standards and of taking care of depreciation or adding to capital.

On the basis of the actual figures shown in the 1946 annual income returns, 29 had an excess of net income over annual payments of more than $3,000; four had $2,500-$2,999; three had $2,000-$2,499; two had $1,500-$1,999 and one had $1,000-1,499. Actual cash family living costs for these 39 families averaged $1,369 in 1946.

Income and Expenses on 1944 Base

Eight records were adjusted to the 1944 base of prices received and paid. The result of adjusting to 1944 was to increase the difference between individual gross incomes over what it was on the 1941 base for the years prior to 1944 and narrow the difference after 1944. The effect on net depended on the proportion of gross going for expenses.

Net income was found to be larger on the 1944 base than it was on the 1941 base throughout. This higher net income was a reflection of two factors: (1) The level of prices received rose more between 1941 and 1944 than did the level of prices paid, and (2) gross income was the larger figure in all cases examined.

The relation of prices received and paid served to illustrate a well-known point: If prices received are higher relative to prices paid in one period than in another with the same items bought and sold, there will be a greater net. When the fixed charges are deducted - illustrated here by annual payments - there is a still greater difference between the residual of net income left for family living and capital accumulation.

Table 12. Average income and expenses on FO farms grouped according to first year's operations under the farm ownership program

No. farms	1939	1940	1941	1942	1943	1944	1945	1946
				Gross income				
5[a]	$ 2047	$ 2454	$ 2965	$ 4549	$ 6210	$ 4992	$ 5158	$ 9096
9[b]		3015	3975	5247	6477	5898	6171	7993
8[c]			4672	5901	7129	6285	6038	7502
14[d]				4669	5443	4988	5297	7347
8					4505	3470	3982	5758
6						3863	3897	5975
				Expenses				
6[a]	1163	885	983	1343	2223	2216	2584	2860
9[b]		965	1373	1656	2507	2569	2799	3078
8[c]			1913	2553	2494	2941	3131	2399
14[d]				2280	2889	2315	2427	1714
8					1576	1784	1722	2137
6						1350	1588	2046
				Net income				
5[a]	1884	1569	1983	3206	3987	2776	2574	6236
9[b]		2051	2602	3591	3770	3329	3372	4915
8[c]			2760	3348	3634	3344	2907	5103
14[d]				3303	3561	2997	2789	4622
8					2929	1686	2261	3621
6						2514	2309	3929

[a] 2 farms in 1945 and 3 farms in 1946 were clear of FO debt.
[b] 1 farm in 1944, 2 in 1945 and 3 in 1946 were clear of FO debt.
[c] 1 farm in 1945 and 3 in 1946 were clear of FO debt.
[d] 2 farms were clear of FO debt in 1945 and 1946.

Income Changes

With few exceptions gross income rose steadily on the 50 farms during the period under study. Expenses likewise rose. Net income in dollar terms rose until 1944 (Table 12). This was to be expected since the rise in prices received was greater than the rise in prices paid (Table 3).

The reaction to conditions in 1944, a year by no means unfavorable to Iowa farmers (Table 10) was interesting compared with 1943. The slight drop from 1943 about 5 per cent, in prices received, together with a 5 per cent rise in prices paid was accompanied by a net income drop of 10 to 30 per cent in dollar terms on the average for those farms operating two years of more under the program (Table 13).

Table 13. Average net income for 1943 and 1944 with 1944 as per cent of 1943 43 FO farms

First year under FO	No. farms	Net income 1943	Net income 1944	Per cent 1944 is of 1943
1939	5	$ 3987	$ 2776	70
1940	8	3941	3329	85
1941	8	3634	3344	92
1942	14	3561	2997	84
1943	8	2929	1686	58

Crops in some sections were poor in 1945 and net income failed to rise for that year, even though prices received rose eight points while prices paid rose only two. Yield data were not available for the

Farm Ownership farms but corn yields in Iowa dropped from 54.0 bushels per acre in 1944 to 46.5 bushels per acre in 1945 (10, p. 154 and 11, p. 154).

Effect of Reducing Gross Income

In order to approximate near depression conditions, gross income adjusted to 1941 was arbitrarily reduced by 15 per cent while expenses were left on the 1941 base. The adjustment was made to secure an estimate of the effect on net income a drop in gross income would have while costs remained unchanged. The relationship was less severe than depression conditions, but well below the actual income situation existing from 1941 to 1946.

The net incomes resulting from the above adjustment indicated that the FO borrowers' margin above living costs, depreciation and annual payments under such conditions would vanish in a year such as 1945 if $1000 were taken as the minimum required to cover those items (Table 14). Furthermore, those borrowers who had had the earliest start under the FO program would have had the best chance of repaying their loans.

The situation portrayed in this assumption was more favorable than it would have been if the assumed relation of costs and prices had existed. The table shows actual figures adjusted to the assumed condition with no correction for accumulation of operating capital which actually took place as against what would have taken place had the assumed farm price-cost relationships existed.

Table 14. Average net farm income, farm ownership farms under two assumed price conditions

Price base	1939	1940	1941	1942	1943	1944	1945	1946
				Group beginning 1939 (5)				
1941 base[1]	$2880	$2248	$1960	$2326	$2388	$1768	$1433	$2925
1941 base less 15 per cent[2]	2263	1770	1541	1797	1755	1240	918	2179
				Group beginning 1940 (9)				
1941 base[1]		2892	2600	2589	2333	2126	1946	2170
1941 base less 15 per cent[2]		2305	2004	1979	1672	1504	1329	1513
				Group beginning 1941 (8)				
1941 base[1]			2760	2294	1960	2110	1596	2386
1941 base less 15 per cent[2]			2059	1608	1233	1446	992	1773
				Group beginning 1942 (14)				
1941 base[1]				2399	2147	1944	1587	2068
1941 base less 15 per cent[2]				1856	1592	1417	1057	1465
				Group beginning 1943 (8)				
1941 base[1]					1761	1038	1320	1620
1941 base less 15 per cent[2]					1302	671	922	1148
				Group beginning 1944 (6)				
1941 base[1]						1657	1367	1806
1941 base less 15 per cent[2]						1249	977	1315

[1] Income and expenses adjusted to 1941 prices.

[2] This net income was calculated by deducting 15 per cent from gross income adjusted to the 1941 base, then deducting expenses as adjusted to the 1941 base.

Family Living Costs

The author was told by FHA officials that Iowa Farm Ownership borrowers raised their level of living substantially after buying farms with Farm Ownership loans. Furthermore, the records showed a rise in expenditures for family living during the period covered by the study. However, the general price level rose during the same period. Therefore, it was decided to check to what extent the sample indicated that family living level had changed.

Cash living costs were used for this check, and data for 13 families out of the sample were used. This group was the largest one active in the sample over a six-year period. The years chosen for comparison were 1941 and 1946.

The 13 families had cash family living costs averaging $617 in 1941 and $1,484 in 1946. When the effect of price changes was removed using the Bureau of Labor Statistics Consumer price index and using 1941 as 100, the relative expenditures were $617 and $1,120 respectively.

In order to accurately measure changes in level of living, family expenditures were put on a per capita basis using Consumer Cost Units (23) for the group for each of the two years. The families totaled 42.1 Consumer Cost Units in 1941 and 44.9 Consumer Cost Units in 1946.

The per capita expenditures on a 1941 base were then calculated and found to be $147 in 1941 while in 1946 it had risen to $250. Accordingly, the analysis supported the belief expressed by FHA officials that levels of living of Farm Ownership borrowers had risen during the period they were with FHA.

Production in Slow Rise

Schickele in 1942 predicted that low income farmers' output would rise if capital resources and management assistance were made available to them (6). Although he neglected to take account of the direction costs would take as output increased, he implied that net production would be increased.

Table 15. Average gross income, farm ownership borrowers and farm business association members (Borrowers grouped by year entering program)

Year	Number	Gross income by years (adjusted to 1941 prices)							
		1939	1940	1941	1942	1943	1944	1945	1946
1939	5	$4120	$3190	$2960	$3530	$4220	$3510	$3440	$4970
1940	9		3920	3970	4070	4410	4150	4110	4370
1941	8			4670	4570	4850	4420	4020	4100
1942	14				3620	3700	3510	3530	4010
1943	8					3060	2440	2650	3150
1944	6						2720	2600	3270
Iowa Farm Business Association 160 acre farms		8168	7455	8782	8912	8729	6891	6860	7857

In order to test this hypothesis in the present study, a rough measure of changes in physical production was secured by adjusting gross income for each year to the 1941 base. With this correction in price level, it was assumed that there would be a general increase in the gross income over time. However, for no group of borrowers was there such a rise. In fact, there was considerable fluctuation from year to year (Table 15). Thus the data in this study did not bear out Schickele's theory. The labor required in relatively non-productive repair work on many FO farms was taken as a partial explanation for the divergence between Schickele's prediction and actual results.

While gross income in dollars rose on the farms included in this study during the period covered, expenses also rose. There were differing rates of rise in prices received compared with prices paid. The effects of rises in the two sets of prices had to be removed in order to determine whether income increased more rapidly than costs.

When gross income and expenses were adjusted for price changes by adjusting both to a 1941 base, net income by groups showed a decline through 1945 (Chart III). However, it must be borne in mind that this is an assumed, not an actual condition.

Another way of showing the same thing was to state expenses as per cent of gross income on an adjusted basis. This method showed a rising percentage of gross income going to expenses through 1945. While 1946 appeared to reverse that situation for most borrowers, that was only one year's experience and was a year of generally high production in Iowa accompanied by high prices. The same general picture of rising

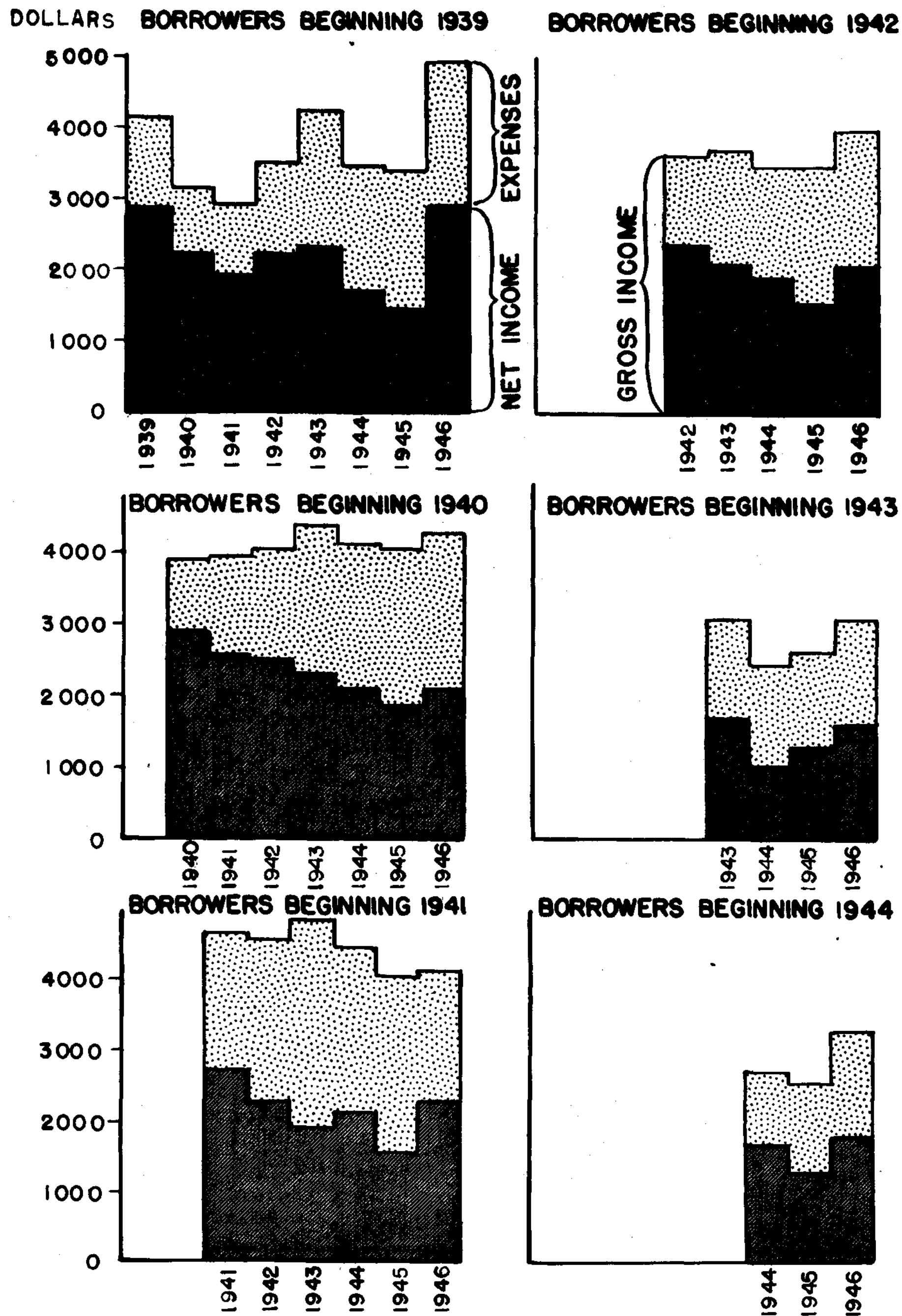


CHART III DIVISION OF GROSS INCOME ON FARM OWNERSHIP FARMS BY YEARS*

* PRICES AND COSTS ARE ON A 1941 BASIS

costs was shown when the median rather than the mean of each group's percentage of gross going for costs was used. The two differed only in detail (Table 16).

The rise in costs relative to income was unexpected prior to making the analysis of gross income discussed above. The relatively rapid rise in prices of goods sold compared with prices on goods bought was presumed to have presented the opportunity for these farmers to add to their capital structure which in turn was expected to enable them to increase output.

Theoretically it would be assumed that if labor were a relatively plentiful resource with Farm Ownership borrowers when they secured FO loans from FHA and if capital were a relatively scarce resource, additions of capital would be expected to increase net income when the relation between costs and prices remained unchanged--an approximation which was attempted by adjusting both to the 1941 base. That is, the marginal return from additions of capital inputs would be expected to yield a positive net return until resources were in balance. Such failed to occur according to the figures compiled for the farms studied (Table 16).

The data presented indicated Iowa Farm Ownership borrowers passed through a period during which their costs rose faster than their incomes increased as shown after removing the effect of price changes. While this is in accord with Schultz' prediction of the effect of shifting from non-owner to ownership status, he based his prediction on the assumption that moving to ownership status required a down payment of 25 per cent on the real estate loan (7) while the FO borrowers made practically no down payment. The data do not cover a sufficiently long period to permit a conclusion regarding the length of time these borrowers required or will require to stabilize their costs in relation to income.

Table 16. Expenses as per cent of gross income, both in terms of 1941 prices, sample of farms under farm ownership program and farm business association farms 1939-1946

Farms beginning	1939	1940	1941	1942	1943	1944	1945	1946
				Mean				
1939	30.0	29.5	33.2	34.1	43.5	49.7	58.3	41.2
1940		26.1	34.6	36.3	47.0	48.8	52.7	50.3
1941			41.0	49.8	59.6	52.3	60.3	41.8
1942				33.7	42.0	44.7	55.1	48.5
1943					42.5	57.5	50.3	48.5
1944						39.1	47.4	44.8
Farm Business Association 160 acre farms	32.5	36.7	41.3	42.7	53.0	53.8	56.1	49.8
				Median				
1939	26.1	30.4	29.9	32.0	42.0	48.4	58.4	40.5
1940		24.5	30.0	24.5	44.8	45.6	51.0	52.5
1941			40.2	41.1	59.1	49.0	59.5	38.9
1942				30.6	42.0	39.0	54.0	43.5
1943					48.0	58.5	52.3	53.7
1944						42.0	50.2	39.6

Since prices received actually rose faster than prices paid during the period under discussion, the rising level of costs in relation to income as shown above by adjusting for price changes was obscured in the actual income figures stated on the borrowers' income returns.

The question now is whether farm ownership borrowers will have the same experiences in the future. The data indicated they will not quickly bring costs into a favorable relation with income unless they have more managerial experience than the men represented in this study. The need for supervision and managerial assistance might have been greater than it appeared to be had prices and costs actually had the relationship assumed in adjusting the income and expense figures to a 1941 base. In fact, there appears to have been a greater need for managerial assistance than was received or perhaps desired by the borrowers. With costs reaching a high level in relation to income, any drop in farm product prices will cut quickly into these farmers' net income unless they develop more of an awareness of their costs than records indicate they have had during the period covered by the study.

The discussion above raised a further question of whether Farm Ownership borrowers can increase production, improve their farms and farming methods and expect to hold costs steady relative to income. The study indicated they did not, on the average, do so but neither did Farm Business Association members, and Farm Business Association members are farmers with more experience and resources than FO borrowers. The discussion was not intended to criticize the borrowers for allowing costs to rise, for improved practices and expansion involve greater costs. However, when costs rose faster than income, on the average, on an adjusted basis, it appeared significant, for if that situation will exist in the future, the condition needs recognition so that means may be devised to facilitate passage through the transition period to the time when the borrower is able to organize his resources and keep costs in line with income.

Management is a skill some people learn more quickly than others. Learning management may involve passage through a period when resources are not efficiently organized. Some farmers will pass through that period more quickly than others. This study indicated the reorganization process took time and was an illustration of a process, not a criticism of the borrower's actions.

Production Problems

Twenty of the 50 farmers in the sample used only horses for power at the time their applications were accepted. Three used only tractors while the other 27 listed both horses and tractors. The value of power and equipment owned by farmers using only horses averaged $638, while power and equipment owned by the 30 using tractors or tractors and horses averaged $1,127. The lowest total value of horses and equipment in use, as stated on the application, was $310, the highest $1,300. The lowest value reported for power and equipment by those using tractors or tractors and horses was $380, the highest, $2,300.

Those farmers who had the least power and equipment as shown by value reported likely were handicapped in their farming operations. With one notable exception, the records indicated these borrowers shifted to more adequate power and equipment just as quickly as they could, but the records did not give a complete picture of the shift. The exception was the man with $380 worth of power and equipment, including his tractor. He kept essentially this same equipment and power throughout his operations with FHA, according to his records. His farm was small, 80 acres, with 54 acres in crops, and he made what equipment he had do the job. The records indicated his chief aim was to pay off the loan. At the other extreme, the man with $2,300 of power and equipment may have had more than he needed for his farm. He had a 160 acre farm with 93 acres in crops.

The differences in power used serves to point up a problem facing farm-ownership borrowers: What size power unit is adapted to their individual conditions? The average crop acreage on the 43 farms, out of the sample of 50, that were still mortgaged in 1945, was 98 acres.

One-plow tractors are available and may have possibilities for adaptation to Iowa Farm Ownership borrowers' farms. Ten of the 50 farms in the sample had less than 70 acres of crop land, ten had 70-79 acres, six had 80-89 acres, five had 90-99 acres, five had 100-109 acres, and 14 had 110 crop acres or more at the time the farm was first operated. The one-plow tractor is an alternative to a two-plow tractor on the smaller crop acreages.

If a one-plow tractor is used by the Farm Ownership borrower, it means he must put in more time in the field than if he uses a two-plow tractor. Alternative uses for his time will determine which tractor will be the best for a particular operator. There is a serious drawback aside from labor attached to a one-plow tractor as the only power unit for a farm. It either cannot perform some of the heavier farm tasks or do so only under ideal conditions.

Accordingly, farm ownership borrowers have faced the problem of making efficient use of power on their farms. Some rented additional land during the war, but this practice is to be discontinued as soon as FHA deems it advisable. Then the borrowers, and FHA, will be faced with the problem of deciding how to adapt power sources to the farms while keeping costs in line.

Soil Conservation on FO Farms

Iowa farm ownership borrowers were urged to use soil conserving practices on their farms according to information given the author by FHA officials. Crop acreage changes shown in the records reflected this advice. The changes in crop acreage on two farms gave clear-cut indication that soil conservation programs had been placed in effect. One of these farms was in Iowa County and was a 145-acre farm valued in 1938 by the County Committee at $10,600. The borrower operated this farm during 1939, 1940 and 1941, using 100 acres for crops. Beginning in 1942 his crop acreage shown in the records dropped to 55 and remained there for the farm through 1945. He increased the acres in crops on the owned farm to 100 again in 1946. His output as measured by adjusted gross income remained virtually unchanged during 1942, 1943 and 1944 following the shift to fewer acres in crops. The adjusted gross income figures for 1945 and 1946 were higher but biased because he rented additional crop land. In this case, production appeared to be neither helped nor hindered by the shift to fewer acres in crops but adopting soil conserving measures may have a beneficial future effect on production.

The second man who reduced his acreage in crops was on a 200-acre Warren County farm valued in late 1941 by the county committee at $9,260. He began with 147 acres in crops in 1942 but dropped to 113 in 1943, to 83 in 1944, 1945 and 1946. He maintained a fairly constant level of output as measured by adjusted gross income, but his adjusted net income fell from $2,690 in 1942, $2,850 in 1943, $1,620 in 1944, $1,350 in 1945 to $660 in 1946.

The information cited above indicated that this borrower has not increased gross production and that net production as estimated by adjusted net income actually declined.

Efficiency of Operation on FO Farms

The efficiency of farmers in the program varied widely as it does with any group of farmers. In order to secure some indication whether the farmers in the sample increased in efficiency over time, the borrowers were grouped according to the year they were first operating under the program. After this was done, expenses on an adjusted basis were compared with gross income, also on the adjusted basis (Table 17). Similar figures for members of the five Farm Business Associations in the state were included for comparison.

Table 17. Expenses as per cent of gross income, both on 1941 base, Farm Ownership and farm business association farms 1939-1946

Year beginning	1939	1940	1941	1942	1943	1944	1945	1946
1939	30.0	29.5	33.2	34.1	43.5	49.7	58.3	41.2
1940		26.1	34.6	36.3	47.0	48.8	52.7	50.3
1941			41.0	49.8	59.6	52.3	50.3	41.8
1942				33.7	42.0	44.7	55.1	48.5
1943					42.5	57.5	50.3	48.5
1944						39.1	47.4	44.8
Farm Business Association 160 acre farms	32.5	36.7	41.3	42.7	53.0	53.8	56.1	49.8

The two sets of farms averaged about the same size. The Farm Business Association farms included no farms in southern Iowa while the FO sample is heaviest in that area (Chart I). Experience and capital controlled provided another point of difference between the groups.

Expenses increased relative to income on both Farm Ownership farms and Farm Business Association farms from 1939 through 1945. It was assumed that Farm Business Association members as a group had more experience than Farm Ownership borrowers as a group and it was known the Farm Business Association members had more resources at their disposal.

When the Farm Business Association members were used as a norm with which to compare cost changes on Farm Ownership farms, it was found the Farm Ownership farms compared favorably with the efficiency on Farm Business Association farms. However, the Farm Business Association farms had higher levels of production and net income giving them greater power to build reserves.

One of the few borrowers among the 50 in the sample who had any real difficulty meeting his amortization payments had high costs in relation to income. This man bought a $12,000 farm in Worth County, moving on it in 1944. His ratios of costs to income on an adjusted basis were as follows: 48 per cent in 1944, 61 per cent in 1945 and 72 per cent in 1946. His crops were severely damaged in 1945, according to the records and he had not gained control of the situation in 1946, perhaps through no fault of his own. Three years' operations provided only a short time for adjustment, an adjustment made more difficult by the poor 1945 crop.

Another high-cost man was one who commenced operations in 1943 in Wayne County on a 200-acre, $8,500 farm. His ratios of adjusted expense to adjusted income were 55 per cent in 1943, 53 per cent in 1944, 63 per cent in 1945 and 73 per cent in 1946. In consequence, his adjusted net incomes were $1,470, $1,460, $1,530 and $900 for the four years, respectively. This man had accumulated only a slight reserve by December 31, 1946, when he had made advance payments roughly equal to one year's annual payment.

The Wayne County family was passing through a high cost phase of the family cycle which may have had an effect. There were four children when application for a loan was made in 1942. Their ages were 15, 13, 10 and 8. By the end of 1946 the children were 19, 17, 14 and 12 though one child had left home.

There were some low-cost operators among the cases studied but low cost was not necessarily synonymous with high production. Consequently, low costs were not necessarily indicative of good management in terms of taking advantage of opportunities offered by the program. In contrast to the Worth County borrower, a farmer operating in Plymouth County during the same three years, 1944, 1945 and 1946, had much lower cost ratios: 25, 25 and 32 per cent for the three years, respectively. His farm was valued by the county committee at $10,325. The adjusted gross income for the two men was nearly the same for the three years, but the Plymouth County man's total adjusted net income for three years was $4,960, while that of the man in Worth County was only $2,920. The Plymouth County borrower's net worth increased from $2,365 in 1943, when he applied for a loan, to $8,168 at the end of 1946. The high-cost man, on the other hand, increased his net worth from $6,105 to $6,698 during the same period.

Another comparatively low-cost operator began operations in 1943. His expenses for the four years for which records were available were 26, 42, 40 and 33 per cent, respectively. This man's farm of 160 acres was in Guthrie County and was valued at $12,000 in 1942 by the county committee. His adjusted net incomes for the four years were

$4,350 in 1943, $2,370 in 1944, $2,370 in 1945 and $4,300 in 1946. He started with a relatively high level of production for a Farm Ownership borrower and when visited by the author, appeared to be an alert, aggressive operator.

An example of low costs, both absolutely and relatively, was provided by a man in Decatur County who operated his own farm for the first time in 1942. The farm was one of 137 acres valued at $5,800. He never increased his size of business, but he was able to keep a rather tight grip on expenses and held his adjusted net income to about an even basis. In contrast to the Guthrie County borrower mentioned above, the Decatur County man had a low production. His adjusted gross income was $2,520 in 1946 compared with $6,400 for the Guthrie County man. Low costs were evidence of unwillingness to expand rather than response to the opportunities offered by the program.

Another example of holding expenses and production to a low level was provided by a Monroe County borrower who started with an 80-acre, $6,500 farm and a net worth of $1,815 in 1942. The farm cost $5,725, or 88 per cent of the reasonable value placed on it by the County Committee. By the end of 1945 the loan of $5,725 was paid. He was so intent on paying off his loan that he held expenses to a minimum to do it and paid the loan in full during the fourth year of operations, even though his gross income on an adjusted basis remained nearly constant and at a relatively low level as well. In 1942 it was $2,610, $2,400 in 1943 and $2,780 in 1945. He took advantage of the times to pay off the loan rather than to expand production.

Repayments Ahead of Schedule

There were 39 reports by borrowers on December 31, 1946. The other 11 in the sample had paid their loans in full before that date. The records indicated the amounts paid on the loan during 1946 or the amount which the borrower expected to pay by March 31, 1947, based on 1946 income. Three of the 39 indicated intent to pay the balance on their loans by March 31, 1947, and that was done. The loan repayments made by the remaining 36 were compared with the payments due according to their repayment schedules (Table 18).

Table 18. Repayments in relation to schedule, 36 FO borrowers, December 31, 1946

		Number
Behind schedule up to 1 year		2
On schedule		4
Ahead of schedule	0-.9 years	6
" " "	1-1.9 "	5
" " "	2-4.9 "	7
" " "	5-9.9 "	9
" " "	more than 10 years	3
Total		36

Borrowers Ahead of Schedule

The three borrowers who had paid or indicated intention to pay ahead more than 10 annual installments by December 31, 1946, were outstanding examples of the lift given borrowers by the program. The three men could have paid their loans in full but preferred to increase production and retain some FO debt. For example, one of the borrowers had a chattel inventory of more than $14,000 on December 31, 1946, and a net worth of $29,600. He came to the FHA with a $4,815 chattel inventory and a net worth of $3,210 in December 1941.

The other two borrowers did not make such spectacular progress but they responded to the opportunity that FHA loans opened to them.

The group of 16 men ahead of schedule by two to 10 years offered other examples of clients who had grasped the opportunities presented by an FO loan. Their accomplishments were partly the result of favorable prices, a situation they acknowledged.

Thus, the 19 men who were ahead of schedule by two years or more together with the 14 borrowers who had paid their loans in full were commendable examples of the ability of the county committees and the Farmers Home Administration in picking families who would take advantage of this opportunity offered by an FO loan.

The five borrowers who had paid ahead one to 1.9 year's payments were slower in repayments than FHA believed desirable. The policy was to encourage repayments and provide a cushion equal to at least two annual installments. One of the five had used his income to increase his operating capital; another started in 1941 with a $5,800 farm, $2,000 of working capital and a net worth of $1,310. This man's resources were low and his progress was retarded for that reason. The other three records indicated the men were slow in increasing their production so made relatively slow progress on repayments.

Borrowers Less Than One Year Ahead of Schedule

There were six borrowers who were slightly ahead of schedule though by less than one year's payment. Two of the six operated for the first time in 1944. One in Worth County had consistently high and rising costs in relation to income while the other's costs were high, they were more moderate in relation to income. The one whose costs were highest in relation to income suffered heavily from drowned crops in 1945. In any event, he had reduced his chattel inventory from $6,650 in early 1944 to $5,187 by the end of 1946. His net worth showed an increase of only $600 after three years' operations. This man's records indicated he would need favorable years for income to successfully carry his loan. The weather for June 1947 may have injured his crops again as it did in 1945 and may keep him from progressing.

The other man who began farming with an FO loan in 1944 and had paid ahead less than one year had a 141-acre farm in Howard County valued at $9,500. He more than doubled his net worth in three years, increasing it from $4,303 to $9,064 while his chattel inventory was increasing from $4,420 to $7,173. He had maintained his production, though not his adjusted net income. The records indicated, however, that he had higher income possibilities, at least in the near future, than the man in Worth County. It appeared the Howard County man had used his income to build up his non-real estate capital rather than make extra payments while the Worth County man has made his payments at the expense of non-real estate capital, at least partially due to circumstances beyond his control.

Another farmer who was ahead of schedule by less than one year started on an FO farm in 1942. He went on a 171-acre, $8,230 farm in Appanoose County. He started with a net worth of $1,981 and $2,512 operating capital. By the end of 1946 he had increased these items to $8,916 and $6,972, respectively. His ratio of expenses to income on an adjusted basis was moderate compared with others in his group. However, he did not increase gross income on an adjusted basis and adjusted net income fell slightly during the period. While he had been able to add to his operating capital during the years under discussion, the favorable price situation was responsible and it appeared he had not yet reached the stage in his organization where he could actually increase production.

The two other borrowers who had paid ahead less than one year's payments each began farming with a Farm Ownership loan in 1940. Each was a relatively high cost operator with expenses taking more of their gross income, on an adjusted basis, at the end of the period than at the beginning.

One of these men increased production, as estimated by adjusted gross income beginning in 1940 and extending through 1943. He then allowed it to decline through 1946 with the result that 1946 production was lower than that of 1940. This man farmed a 122-acre $8,400 unit in Jefferson County. He increased his net worth from $2,574 in September 1939 to $10,911 by the end of 1946. During the same period his operating capital increased from $3,808 to $7,140, or 88 per cent. However, since the index of prices paid (1910-14 = 100), including livestock, rose from 130 in 1939 to 193 in 1946 or by 48 per cent, his increase in operating capital in physical terms was substantially less than the dollar increase.

The records showed the wife of the borrower was ill in 1944 and died in 1945, leaving three children aged 12, 10 and 8. The borrower's production began declining the year his wife became ill. The financial drain of his wife's illness and death together with the responsibility for the children coincided with the borrower's declining production. This man's future appeared to depend on his ability to recover from the loss of his wife, but the records indicated he had not yet made the adjustment by the end of 1946. However, as only one year had passed after his wife's death, there was insufficient information on which to judge his recuperative powers.

The second man who began operations in 1940 also had sickness in his family. The farm was bought from the borrower's father, an elderly man who was about to lose the farm. It was valued at $16,500 by the county committee and cost $12,430. It took $12,000 to pay the mortgage held against the father and the $430 represented $330 for repairs and $100 acquisition costs. One stipulation of the sale was that the son had to care for the father during his lifetime. He died in 1945. In addition to that expense, there were two children born into the family, one in 1942, the other in 1946, bringing the total number of children to five, the oldest in 1946 being 11 years.

This borrower increased his net worth from $3,630 in 1939 to $11,739 in 1946 while increasing his operating capital from $3,670 to $8,778. Although he raised his level of production slightly, his net income on an adjusted basis declined.

Borrowers on Schedule

There were four men exactly on schedule on December 31, 1946. They were progressing satisfactorily from the standpoint of repayments since their repayment schedule was set up for a 40-year period. The 40-year repayment schedule was set up to pay for farms appraised on a long term normal value concept. Farm income during the four-year period these four men operated with FHA Farm Ownership loans was higher than that anticipated in the repayment plan established for FHA FO borrowers.

The records were examined for indications of the four borrowers' financial progress not shown by their repayments. The first record studied was for a farmer on a 160-acre Madison County farm valued at $9,000. There were 88 crop acres on the farm and he started farming as an FO borrower using only horses for power. It was the fourth year of operations, 1946, before he increased his level of production, as measured by adjusted gross income, above that of 1943. Likewise, his adjusted net income was not above his first year's net until 1946. During the four years he increased his net worth, in dollar terms, from $4,338 to $5,235 or only $897. During the sample period, he was increasing his chattel inventory from $4,235 to $4,445, less than enough to compensate for the changes in price level between late 1942 and the end of 1946. Thus, it appeared from the information in the records, that this borrower was a doubtful risk even though he was meeting his scheduled payments.

The second man on schedule was a borrower in Mitchell County on a $12,400 farm whose net worth when he applied for a loan in late 1943 was $7,110 and who had $7,115 in operating capital. While this man succeeded in increasing his output each year, as well as his net income, on an adjusted basis, he had only $2,000 more net worth and $700 more operating capital after three years' operations than he had in late 1943 when he applied for a loan. On the basis of this information the borrower appeared to be a doubtful risk, or one who might well be encouraged to repay as rapidly as possible during the existing period of high farm income.

The third man on schedule moved onto an 80-acre, $9,600 farm in Plymouth County in 1944. He showed $3,881 of operating capitalin his application made in November 1943.

His total net income for the four years' operations was $8,085. He was not able to maintain his gross income in dollars at a constant level during the period. Instead it declined. His adjusted gross and his adjusted net income were both higher the first year than in either of the three succeeding years. The adjusted figures showed a level less than half as high in 1946 as in 1943.

Had 1941 prices and costs prevailed he would have had only $1,125 annual net income to meet annual payments of $362 per year and meet living costs and depreciation. Due to existing conditions, however, he was able to increase his net worth from $3,166 to $5,850 and operating capital from $3,881 to $4,057. The latter change could be more than accounted for by price changes.

Cash family living costs were held almost constant during the four years and appeared high for a family of four, being $1,212 in 1946. Of this, $624 went for food while the value of farm furnished food and fuel was given as $625 additional. The records indicated that this man had not effected an efficient organization on his farm, nor the wife an efficient organization of the household. Apparently the man needed assistance if he were to successfully carry his loan even in good years. The family and the loan were prospective problems for the farm and home management supervisors.

The fourth borrower who was just on schedule was on an $8,000, 160-acre farm in Taylor County. He originally had a net worth of $2,968 and had $3,433 in operating capital. By the end of 1946 these had been increased to $5,195 and $4,903, respectively, but non-real estate debt had increased from $1,165 to $1,849 without a compensating increase in gross income. Gross income in dollars was less than 10 per cent greater for 1946 than for 1943 and adjusted gross income was smaller in 1946 than in 1943. In other words, he had not increased his level of production.

Had 1941 prices and costs prevailed throughout, he would have had a total net income for the four years of $3,970 to cover $1,060 of annual payments plus living costs and depreciation. The records indicated this borrower had not made satisfactory adjustment after four years' operations on the farm he bought with an FO loan, even though economic conditions were favorable. Accordingly, it appeared he needed more effective supervisory assistance than he had had to date.

Borrowers Behind Schedule

The records indicated that of the two borrowers behind schedule, in their repayments, one was a relatively low-cost operator, but his income and production were low as well. However, due to the favorable price situation existing he had more than doubled his chattel inventory during the three years he operated under the program from $2,760 to $6,540. This man had a standard loan from FHA when he secured his Farm Ownership loan. His net worth was only $2,365 in 1943 when he applied for the FO loan. His 170-acre farm was valued at $10,325 by the county committee which meant it was above average for FO farms in productive value. He appeared to be a conservative operator who started on a low level of operating capital and this restricted his income.

The other man behind schedule was on approximately the same size farm, 167 acres, but the farm was valued by his county committee at only $6,500. He had increased his operating capital from $3,970 in late 1942 to $9,511 at the end of 1946 and had more than doubled his adjusted gross income in four years, making a better record in that regard than the first man and indicating a greater debt paying capacity. He was also an older man than the first borrower which may have given him a better grasp of the opportunity presented him by the times.

While the records showed these men to be behind schedule on their payments, they had added to working capital on a dollar basis at least ten times the amount of payments in arrears. The man on the lower valued farm appeared to be the better risk for the future, however, as he had increased his output more rapidly than the borrower on the better farm.

To sum up, of the 12 men who were behind schedule, on schedule, or less than one year ahead of schedule, there were six whose net income on an adjusted basis had definitely fallen during the period for which records were available, while net income for three appeared to have definitely increased, and three had just held even.

Capital Resources on Farm Ownership Farms

An attempt was made to secure a comparison of capital resources available on Farm Ownership farms with other Iowa farms. Estimates of capital in use on Iowa dairy and hog-raising farms made by the North Central Regional Land Farm Committee (5) were available for comparison.

Resources on FO farms were more adapted to hog-raising than beef-feeding or beef-raising. Livestock income on FO farms in the sample averaged $3,448 from livestock sales and $1,149 from livestock products. Farms of Farm Ownership borrowers thus appeared to be predominantly hog-raising in type and the capital in use on FO farms was compared with the estimates made by the Committee of the capital in use on Iowa hog-raising farms.

The capital used on Iowa hog-raising farms was estimated by the Regional Committee at $17,788 in real estate capital and $8,208 in operating capital in 1945 (5, p. 9-12). There were 43 sample farms still in debt for Farm Ownership loans in 1945. Of these 43, only six reported operating capital in excess of $8,000; three reported $7,000 to $7,999; 13 reported $6,000 to $6,999; six reported $5,000 to $5,999; eight reported $4,000 to $,999 and the other seven reported less than $4,000 operating capital. This comparison indicated Farm Ownership farms were under-capitalized with regard to operating capital, taking the Land Tenure Committee's estimate as a guide to capital requirements on commercial family-type hog-raising farms in Iowa. The farms for which the Committee made the estimate averaged 132 acres in size (5, p. 10).

The Committee reported the farms for which it was estimating capital in use were valued during the period 1947-40 at $11,938 in the records kept on the farms. This value was considered more nearly comparable with the average appraised value of the 43 Farm Ownership farms, $9,057, than the estimated value for 1945 would have been, since the Farm Ownership Farms were valued on a long-time earning capacity basis.

The analysis presented above indicated Farm Ownership farms were undercapitalized in both land and operating capital when compared with commercial family-type Iowa hog-raising farms. The discrepancy was more significant in the case of operating capital since more land resources were controlled, on the average, than that represented by the $9,057 of owned land. Seven of the 43 men rented additional land totaling 723 acres, thus increasing land resources in use. Values on this rented land were not available.

Where land resources were limited, the borrowers needed compensating resources in the form of operating capital in order to achieve the status of family-type commercial farms. The comparison made above indicated few borrowers had secured control of sufficient operating capital to place them in the class of commercial family-type farms. They were moving in that direction, however.

Fixed and Variable Repayment Plans

The FO borrower was permitted to choose whether he preferred to follow a fixed or variable plan of repayment. The fixed plan limited his obligation to the scheduled annual payment, but he had to meet this payment or be deemed delinquent. The variable payment plan, on the other hand, used the annual payment merely as a base and the payment could be scaled up or down if it were determined by the supervisor that such procedure was justified by the borrower's income (8).

Borrowers on fixed plans might change to the variable plan at any time while their loans were in good standing but not after they had become delinquent.

Payments in excess of amortization requirements resulted in interest reductions for the borrower, but did not necessarily change the date of final payment. That is, extra payments when operating under the fixed plan were applied to the "far end" of the loan, bringing maturity date closer. By so doing, no "cushion" was provided for difficulties although it was difficult to visualize the FHA soon becoming harsh with a borrower who had become delinquent after making extensive extra payments.

Variable payments in excess of annual payments applied to the "near" end of the loan and provided a "cushion" for adverse years.

Thirty-three, or 66 per cent, of the 50 farmers included in the sample operated under the variable plan according to the last income report available for them. On June 30, 1947, 74.6 per cent of all active Iowa FO borrowers were on the variable plan (22).

Paid Up Borrowers

Fourteen, or 28 per cent, of the borrowers included in the sample had paid their real estate loans in full by March 31, 1947, when the records were collected. On that date, 288, or 31.3 per cent of all 921 loans made prior to June 30, 1946, had been paid in full.

Ten, or 71.0 per cent, of the 14 borrowers in the sample who paid their loans in full by March 31, 1947, did so from farm income. This compares with 217, or 81.6 per cent, of the 288 loans paid in full in the state that were listed on March 31, 1947, as paid from farm income.

Letters written by paid-up borrowers to the Farmers Home Administration at the time their loans were paid off were eloquent with appreciation for the opportunity they had had of paying for their farms. These letters gave evidence of the renewed hope and confidence these people were given by FO loans. The same attitude was evident among active and paid-up borrowers visited by the author in Dallas, Greene and Guthrie Counties.

The thankfulness the letters and the people visited expressed at being given a chance to own their farms was intangible, not measured in dollars. In other words, society's return on its investment in FO loans returned a dividend which did not appear in the financial records.

At least four of the 14 were known to have paid off their loans with funds other than those provided by farm income. One of the four made final payment from proceeds of a $3000 personal note. Another sold his farm because of trouble with a neighbor, then bought elsewhere in the same county. A third made final payment from an inheritance and by refinancing with another credit agency so that he could buy an additional 80 acres. The fourth sold out as he was dissatisfied with the community and with the size farm he had. He bought another farm in the community where he lived prior to securing an FO loan.

The median size loan of those in the sample who had paid their loans in full by March 31, 1947, was $10,092. This compares with the median of $9,270 for all 50 loans. The median net worth before acceptance for these 14 was $3,168 while the median for all 50 borrowers in the sample was slightly higher, $3,205.

Four of the 14 farms cost the full reasonable value placed on them by the county committees, seven cost from zero to 5 per cent less than the reasonable value, two cost from 5 to 10 per cent less and one cost 12 per cent less. Among the group of 50 farms only nine cost the full reasonable value while another 25, or one-half, cost within 5 per cent of the reasonable value.

The borrowers who paid up were not necessarily those who held costs to the lowest proportion of gross income (adjusted basis) (Table 19). For example, in the 29 reports of annual expenses available for five paid-up borrowers who began operating in 1940, 11 reports showed costs which were a higher percentage of gross income than the average for all borrowers for the respective years. For those beginning in 1939, there were eight of 19 annual reports above the average for the group; for those beginning in 1941 there were seven out of 14 above the average and for those beginning in 1942 there were eight of 11 above average.

Table 19. Expenses as percentage of gross income and showing comparison between 14 paid-up borrowers and the average for their respective groups[1]

	1939	1940	1941	1942	1943	1944	1945	1946
Farm #18	26.1	30.4	59.3	47.9	62.7	57.5	-	-
#39	19.3	24.2	29.9	32.1	57.3	48.4	66.8	-
#40	23.5	17.3	22.1	26.9	31.1	99.4	-	-
All borrowers beginning 1939	30.0	29.5	33.2	34.1	43.5	49.7	58.3	41.2
Farm #9	-	36.5	30.0	24.7	44.8	35.5	-	-
#16	-	22.7	31.9	33.7	59.4	48.5	46.2	45.2
#17	-	15.5	29.6	39.4	62.0	70.9	78.5	57.0
#22	-	18.5	34.1	38.2	36.1	42.5	43.6	-
#46	-	39.2	22.4	46.4	53.2	-	-	-
All borrowers beginning 1940	-	26.1	34.6	36.3	47.0	48.8	52.7	50.3
Farm #3	-	-	42.6	91.8	67.1	84.8	83.7	-
#6	-	-	37.9	38.6	68.9	47.6	-	-
#11	-	-	26.8	28.4	60.8	31.4	48.6	-
All Borrowers beginning 1941	-	-	41.0	49.8	59.6	52.3	60.3	41.8
Farm #4	-	-	-	57.4	44.2	57.2	-	-
#7	-	-	-	38.1	47.6	38.8	69.2	55.0
#34	-	-	-	28.7	56.2	18.7	-	-
All borrowers beginning 1942	-	-	-	33.7	42.0	44.7	55.1	48.5

[1]Income and expenses adjusted to 1941 prices.

Table 20. Net income of paid-up borrowers and all borrowers by year beginning under farm ownership program, 1939-1946[1]

	1939	1940	1941	1942	1943	1944	1945	1946
Borrowers beginning 1939								
Farm #18	$4390	$2720	$1070	$2960	$1840	$2180	-	-
Farm #39	2090	1790	1850	1420	1620	1820	$1300	-
Farm #40	2180	2870	2540	2280	3550	10	-	-
Average of all	2880	2248	1980	2326	2388	1678	1433	$2925
Borrowers beginning 1940								
Farm #9	-	1480	2400	3590	2010	2960	-	-
Farm #16	-	3600	2970	2950	1450	2340	2550	2790
Farm #17	-	3710	2450	2290	1340	770	810	1960
Farm #22	-	2140	4300	2100	2380	-	-	-
Average of all	-	2892	2600	2589	2333	2126	1946	2170
Borrowers beginning 1941								
Farm #3	-	-	5460	450	2690	570	770	-
Farm #6	-	-	3560	4940	2030	3400	-	-
Farm #11	-	-	3410	4100	1620	3380	2370	-
Average of all	-	-	2760	2294	1960	2110	1596	1990
Borrowers beginning 1942								
Farm #4	-	-	-	1640	3040	1600	-	-
Farm #7	-	-	-	2790	3760	4050	2420	4110
Farm #34	-	-	-	1860	1050	2260	-	-
Average of all	-	-	-	2399	2147	1944	1587	2068

[1] Net income computed after adjusting income and expenses to 1941 prices.

The paid-up borrowers' net incomes on an adjusted basis were compared with the average of those borrowers beginning the same year. (Table 20). The data indicated that paid-up borrowers had net incomes slightly above average. Of the 73 annual reports tabulated for the 14 paid-up borrowers, 41 showed net income on an adjusted basis greater than the average for their respective groups.

Postwar Prospects for Farm Income

Farm income is not expected to continue at the level existing during the war and immediate postwar period. Net incomes on Iowa farms in 1945 were more than double the 1941 level and 1946 net incomes were higher than in 1945 according to figures released (12) for corn belt farms. The U.S. Department of Agriculture, in that release, estimated net incomes per operator on corn belt hog-dairy farms at $5,592 in 1946 compared with $3,960 in 1945 and a 1937-41 average of $1,399.

Farmers agree with others that the war and immediate post-war level of farm incomes will not last though there is a divergence of estimates as to the time the drop will come and the extent of the decline.

So long as employment in the industrial sector of the economy stays high, the market for Iowa farm products will remain active. Other sections of the United States such as the wheat and cotton areas are more dependent on exports.

Costs may be expected to rise even after farm product prices have reached their peak or begun declining, with consequent squeezing of net incomes.

Farm Ownership borrowers are paying their loans at a rapid rate - approximately one-third of all Iowa loans were paid in full by June 30, 1947. The concern over possible price declines was an important factor spurring repayments. The borrowers visited in Dallas, Greene, and Guthrie Counties expressed a desire to pay in full, or pay well ahead while income was high to provide a safety margin against the less favorable times they believed were approaching. As one FHA official remarked to the author, another two years with income such as in 1946 and the first half of 1947 could liquidate the FO program in Iowa. That was a slight exaggeration,though the number of active cases would decrease rapidly under such conditions.

If the expected decline in net incomes materializes and if it should drop to the 1941 level, repayments would slow down. When land prices became adjusted to a 1941 level of net incomes, the FO program could again operate in Iowa. It virtually ceased operations during the high price period since farms could not be bought on the basis of long term normal value. Until such time as land prices and FHA long term normal values come closer together, the land purchase program in Iowa will be small regardless of the amount of funds available for loans.

THE FARM OWNERSHIP PROGRAM IN TERMS OF RESOURCE ALLOCATION

This study shows that while the bulk of farm ownership borrowers have made rapid strides in capital accumulation, debt retirement and increases in level of family living, a few did not. The period covered by the income records, 1939 through 1946, was a more favorable one economically for agriculture as a whole than may be expected again soon, but there were still these few individual cases that only held about even for one reason or another.

In addition, there were borrowers who had difficulty in adjusting to the community pattern wherein they found themselves. Yet the county committees endeavored to fit the family to the farm which, if done, involved fitting the family into the community.

What then can be said of resource allocation as a result of the program's operation now and in the future? Is it likely to have a beneficial over-all effect so far as society is concerned?

The economy of a free society relies on market prices to channel production goods into the uses where needed to produce the desired goods and services. The price of capital so far as the individual farmer is concerned, is the interest rate. The FO loans were made at a rate below the market rate of interest in Iowa, at 3 per cent originally though this rate was raised to $3\frac{1}{2}$ per cent in 1946. During the period covered by the study, insurance companies and other lenders competing for loans on farm real estate established four per cent as approximately market rate on first mortgage real estate loans in Iowa, loans usually not over 65 to 75 per cent of the value of the security compared with FO loans at 100 per cent of security value.

Lower interest rates and higher loan percentage granted by FHA were in addition to resources put into the servicing of its loans in the form of farm and home supervisory personnel. These all represented elements of subsidy when compared with the lending activities of other agencies making loans.

The market rate of interest, however, does not necessarily allocate resources properly in agriculture. It is too insensitive to differences in risk between individuals with the result that a potentially able manager with little experience and backing cannot secure capital at any price even though he could earn much more than the funds would cost if a mechanism were available to assess a charge for the greater risk involved due to his inexperience. That is, funds are available within a narrow range of interest rates, and anyone falling outside the range on the high risk side is denied capital even though the potential returns be high. This situation is, of course, true in other forms of business as well as in agriculture when the investor and the user of funds are separated to the extent--in time, place or understanding--that the investor in general sells his funds at the going rate and is in no position to adjust it to the individual case. The result is a form of capital rationing over which the individual on neither side has control, and opens the question whether society can take a larger view and make such investment in an attempt to secure maximum production from resources which would otherwise be underemployed, at least for some period of time. The management resource represented by farmers eligible for FO loans represents that type case.

Schultz brings out the handicap facing farmers with low capital accumulation and, hence, low borrowing ability (7, pp. 310-312) and discusses the rationing actually performed by credit agencies and land owners whose decisions on extension of credit or renting land resources set the limits on the amount of capital secured by farmers with low credit rating. Two FO borrowers whose records were used in this study illustrate the situation--one had a net worth of $1310 in late 1940 when he applied for an FO loan. The other reported a net worth of $1,460 on his application filed in early 1941. There was little earning capacity in evidence to encourage a credit agency to lend funds, or to encourage a landlord to rent land, to these men. Thus, it can be said the FO program eased rationing of capital for part of those who secured loans.

Relatively few farmers have been helped as yet by the FO program at the height of lending activity in Iowa in 1941 and 1942, barely one applicant in 25 (390 loans and 9637 applicants during the two-year period) received a loan (Table 8). The total number of loans made in Iowa through June 30, 1946 was 921 or only slightly more than one per cent of the 88,245 rented farms in Iowa as reported in the 1945 Census of Agriculture.

Management is one of the resources given opportunity for extra contribution, and the extra production farm ownership borrowers add to the stream of goods and services available to society may well justify the subsidy feature mentioned earlier and, if expanded to others who are handicapped by capital rationing, return further dividends to society.

Leadership resources among farm ownership families may be more adequately used as a result of stabilizing their places in the community more quickly than would otherwise be the case, for such stability would allow the leadership to develop more quickly than if the families secured stability of tenure later as renters or owners.

Greater opportunity for education will be provided children of FO borrowers than would be available to them as children of tenants moving frequently. Since education in the broad sense increases the mobility of resources, anything the FO program does to raise the level of education of children in the group will fit the human resources involved for smoother adaptation to the needed allocation of that resource than would be the case otherwise. The FO borrowers visited by the author evidenced a strong interest in giving their children a good education so they could have a greater opportunity of doing what they wished than their parents had. Other measures than FO loans which promoted stability of tenure among farm operators could have the same effect.

Farm ownership loans are restricted, by law, to farm families unable to secure real estate credit from other sources. Accordingly, it may be assumed their capital resources will be low. Furthermore, the $12,000 limit on real estate loans means that, in Iowa at least, the land resources ordinarily will be low in relation to the popular mechanized unit of equipment prevalent in Iowa, i.e., the two-plow tractor. Horse power would be a more divisible unit, but it is more realistic to assume the use of tractor power on Iowa farms.

Initially, then, it may be assumed that an FO borrower will have a plentiful supply of labor in relation to his fixed (land) and working capital.

In order that a large volume of output per man can be secured there must be intensification on these farms so long as FHA follows a "no renting" policy. If the borrowers selected by county committees are men with the ability to intensify on their farms--an ability which will be undeveloped due to the limited capital resources the men will have had prior to securing an FO loan--then a high degree of output per man may be attained eventually with full use of resources involved. That is, the committees would have to choose men who fit an intensive program. Unfortunately, the problem of choosing this type of manager from the ranks of relatively untried men, as the county committees are forced to do, is an extremely difficult task.

If, on the other hand, the county committees select a cross section of men as borrowers there will be some whose ability as managers is greatest in organizing resources of a farm on an extensive rather than on an intensive scale. Forcing all these men into the same pattern of organization will lead to less efficient use of resources than if each man is allowed to organize in line with his abilities.

The committee's role is particularly important if FHA continues one form of rationing in effect in the FO program, i.e., the "no renting" policy, for in so doing it narrows the range of enterprises which may be engaged in and, in so doing, reduces the size of the group from whom successful borrowers can be drawn. Then the committee's task becomes more difficult for it must fit an able man of a particular type to a farm.

Whether the program will result in good or poor resource allocation this will depend in large measure on the county committees. If the members of the committees by their collective judgment recognize superior managerial and leadership ability sooner than credit agencies or landlords would do so, and through FO loans, alleviate the capital rationing involved then FO loans may well increase production more than enough to offset the subsidy feature involved; that is, leave a net in goods and services to society through the program, so long as the program is of a size which allows the possibility of selecting borrowers with greater than average potential managerial and leadership ability.

SUMMARY

1. Two appraisals were made on each farm purchased by a Farm Ownership borrower. The county committee could make its appraisal of the farm in relation to the man who was trying to buy it. The Farmers Home Administration appraiser made his appraisal on the basis of the long term normal agricultural value of the farm.
2. The length of time required to close loans was lengthened by technicalities in some cases though the March 1 possession date spurred closing.
3. Farmers Home Administration Farm Ownership loans in Iowa were limited legally by the county average value of farms over 30 acres prior to 1946. In that year the average was redefined in a way which permitted larger loans. The FHA had a $12,000 administrative limit which became operative when the legal limit rose above that figure. The administrative limit restrained loaning operations in the Iowa areas with the highest tenancy rate, for that area was also the area with highest farm values.
4. Only 16 per cent of the borrowers included in the study made any down payment on their farms. Loan size and cost of farms were virtually equivalent.
5. Farms were bought with FO loans for less than the value placed on them by the county committees.

6. Only three of the 50 loans examined would have been insurable under the 1946 insurance provisions which authorized FHA to insure loans for other lenders when the loan was for 90 per cent or less of a farm's reasonable value.
7. Improvements and repairs made by FHA on farms purchased with FO loans varied widely. Farm visits indicated the repairs and improvements so made remedied only the most important problems leaving much relatively unproductive repair work to be done by the borrower.
8. A higher proportion of the large loans in the sample were paid in full than were the small loans.
9. Applications for loans far exceeded the number of loans which could be made each year. The program could have been expanded materially without accepting less desirable borrowers than were accepted.
10. The gratitude expressed in letters written by FO borrowers to FHA and in personal conversation with the author was impressive evidence of the response most borrowers made to the opportunities offered by FO loans.
11. Having to locate in new communities caused some dissatisfaction among FO borrowers. Too small farms also was a source of discontent.
12. Incomes received by FO borrowers during the period 1939 through 1946 enabled the borrowers to make rapid repayment of their loans.

By the end of 1946 repayments were running far ahead of new loans, for the conditions making rapid repayment possible brought about increasing land prices which virtually caused FHA to cease buying farms in Iowa.

13. Certain borrowers in the sample grasped the opportunity provided by an FO loan and FHA advisory assistance to expand their operations. The average borrower increased his production slowly, if at all.

14. Costs rose faster than income on the average when both were measured in 1941 terms. This pointed up the problem of resource allocation facing men moving to ownership status. The process of resource allocation and production expansion involved decisions for which the men were relatively untrained by previous experience. While the study demonstrated the problem, the period of time the borrowers had operated with FO loans was too short to show how long they required to master it.

15. Borrowers farming with horses shifted to tractors when possible during the period studied. This shift highlighted the problem of efficient power use on FO farms for the average crop acreage was only 98 acres for all FO farms in the state. While one-plow tractors were available for use on farms with low crop acreage, they had less appeal than two-plow tractors. Moreover, the use of two-plow tractors was to the farmer's advantage if he had alternative uses for the time saved.

16. The FHA encouraged its borrowers to follow soil-conserving practices. This involved reducing crop acreage on some farms and this reduction was partially compensated for by renting additional land.

17. The FO borrowers in the sample were ahead of scheduled repayments as a group. They were encouraged by FHA to repay rapidly, and the borrowers visited by the author expressed a personal desire to pay ahead rapidly to provide a safety margin for the rougher times they believed lay ahead.

18. Thirty-seven of the 39 borrowers in the sample still in debt on their FO loans December 31, 1946, were on or ahead of schedule on payments. The other two were behind, but both by less than one annual instalment. Neither was in danger of becoming seriously delinquent with farm prices at the level existing during 1946.

19. The year 1945 adversely affected net income on FO farms. Corn yields dropped to 46.5 bu. per acre for the state as a whole compared with 54.0 bu. per acre average in 1944. Since FO farms were only average or below in general productivity for their areas it may be assumed the drop in yield on these farms was proportionately greater than for the state as a whole.

20. The estimate of FHA officials that FO borrowers raised their level of living after receiving an FO loan was verified by the group of borrowers active in 1946 who were active also in 1941.

SUGGESTIONS AND PROBLEMS FOR FURTHER STUDY

In view of the foregoing analysis of a sample of FO borrowers, the author makes the following suggestions regarding the program as it operates in Iowa.

(1) It is recommended that a simple system be devised for maintaining in county offices a year-to-year record of borrower's progress. This recommendation arises from the differences apparent between actual income and income calculated by removing the effect of price changes. A system such as that suggested would use constant values on inventory and would involve adjusting yearly income and expenses to some base year to remove the effect of price changes. This method would provide comparable data on income and expenses from year to year. It would show what a borrower did over a period of time financially and indicate conditions needing the supervisor's attention. While such a procedure would not show the complete story, it would be a valuable aid to the supervisor and, in case of personnel changes, enable a new supervisor to gain familiarity with a borrower's previous actions more easily than the original records would do.

The proposal outlined above would have a definite value also if farm product prices recede or for some reason reach an unfavorable relation with prices paid for articles used in production. It would assist in securing a balanced picture of a borrower's operations in a period such as 1933-1937. During an unfavorable price and cost period, the supervisor might find the system outlined above an assistance in maintaining borrower morale by using it to give the borrower a better perspective of his progress than the actual records and show him that his apparent lack of progress was not the result of his own actions. The writer believed such a proposed system is justified as a long range policy since the loans are written to extend over a 40-year period. It seems to him unlikely that favorable price and cost relationships would prevail during a 40-year period, the possible life of an individual loan, or indefinitely, in the case of the program, assuming it to be a continuing one.

(2) The writer suggests that the county committees and the supervisors be encouraged to urge the borrower to enlarge his size of business as rapidly as his managerial ability will permit. It is recognized that such a procedure would involve the borrower in some non-real estate debt, but the committee members and the supervisor through their combined experience may be able to help the borrower see income possibilities through non-real estate loans that he would not recognize by himself.

(3) The records studied suggested the continuing need in Iowa for highly trained supervisors to assist borrowers to make the adjustment to ownership. Supervision was difficult during the war due to shifting and loss of supervisory personnel which reduced the opportunity for supervisors to develop the necessary close personal relationship with borrowers. There was also the further factor that the borrowers had a sufficiently high level of income that they saw less advantage to themselves in seeking supervisory assistance. Thus, the inadequacies of

supervision in Iowa indicated in the study were not necessarily due to the supervisors and conclusions drawn should not be considered criticism of Iowa supervisors. Rather, the study indicated there was a supervisory task involved, a task obscured during the period under study by the existing cost and price relationships. Paul V. Maris, in charge of the Farm Ownership program for the United States, stated in 1946 that supervision was an important problem throughout the country (3, p. 13).

(4) The study indicated the need in Iowa for supervisors trained in farm management. The author uses the term "farm management" to denote the decision-making phase of operating a farm as distinct from the production phase. The general tendency among the borrowers in the sample was to allow costs to rise faster than income was increased, a sign interpreted by the author that borrowers needed managerial training and assistance of the type defined above. Such assistance was difficult to give, the author realized, not only due to the factors outlined in (3) above but by the sheer difficulty of teaching management.

(5) It is suggested that study be given the possibility of establishing a policy of emphasizing capital accumulation as a mark of progress. This would be together with or overshadowing the emphasis placed on repayments as a mark of progress. The practice followed in news releases and annual reports has been to emphasize repayments and changes in net worth on farm ownership farms. This study showed that repayments taken alone could be misleading concerning the real progress borrowers were making toward developing commercial family type farms.

(6) The FHA in Iowa is hampered to some extent in its long range program because lending operations are tied to yearly appropriations from the Federal Treasury. Against this, of course, is the policy Congress believes best so far, annual review of the program.

If, at some future time, Congress decides to make the program a permanent source of real estate credit, then it is suggested that a revolving fund might be set up for loan funds rather than using annual appropriations. In that way, highly trained personnel might be easier to attract than where the program is on a year to year basis regarding funds.

(7) The following are recommendations of topics for further study as suggested by the problems encountered in this study. They are of two types, (a) for study of problems suggested by the sample, and (b) for developing tools needed in an analysis of the type undertaken in this study.

a. Problems suggested by the sample needing further study

(1) Effect of real estate loan size on repayment capacity.

(2) Effect of real estate loan size in relation to appraised value on repayment capacity.

(3) The effect, if any, that environment has on a supervisor.

(4) Problems in supervision arising due to the same personnel advising both standard and Farm Ownership borrowers. That is, do supervisors take different approaches when working with the two groups of borrowers?

(5) Reaction of borrowers to supervision and other obligations accompanying Farm Ownership loans from FHA. The Bureau of Agricultural Economics conducted a study of similar nature, though not in Iowa, for FHA, but the results have not been released.

b. Studies needed to develop tools for an analysis of the type undertaken in this study:

(1) The techniques for teaching management to farm operators. That is, what techniques can a supervisor use to teach management to an FO borrower?

(2) The time required by a farmer changing tenure status to organize his resources efficiently under the new status.

(3) The minimum resources required for a commercial family-type farm in Iowa to provide a reasonable opportunity for success under average management.

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